AL.1.1636
c.2

APPENDIX II

2002
ALBERTA
LINEAR PROPERTY
ASSESSMENT MANUAL

Alberta
MUNICIPAL AFFAIRS

APPENDIX II

2002

ALBERTA

LINEAR PROPERTY

ASSESSMENT MANUAL

Alberta
MUNICIPAL AFFAIRS

ALBERTA
MINISTER OF MUNICIPAL AFFAIRS

MLA, Fort McMurray

DUPLICATE

MINISTERIAL ORDER NO. L:143/02

I, Guy Boutilier, Minister of Municipal Affairs, pursuant to sections 3(2), 5(2), 6(2), and 7(2) of the Matters Relating to Assessment and Taxation Regulation (AR 289/99) make the following order:

- The 2002 Alberta Farm Land Assessment Minister's Guidelines,
- The 2002 Alberta Linear Property Assessment Minister's Guidelines,
- The 2002 Alberta Machinery and Equipment Assessment Minister's Guidelines, and
- The 2002 Alberta Railway Assessment Minister's Guidelines,

as set out in the attached consolidated document, are established.

Dated at Edmonton, Alberta, this 28 day of November, 2002.

Guy Boutilier
Minister of Municipal Affairs

227 Legislature Building, Edmonton, Alberta, Canada T5K 2B6 Telephone 780/427-3744, Fax 780/422-9550
102, 9925 Biggs Avenue, Fort McMurray, Alberta, Canada T9H 1S2 Telephone 780/790-6014, Fax 780/791-3683

Digitized by the Internet Archive
in 2017 with funding from
University of Alberta Libraries

https://archive.org/details/albertalinearpro2002albe

ALBERTA

Copyright of the Statutes and Regulations, whether in print or electronic format, belongs to the Province of Alberta. No person may reproduce copies of Alberta Statutes and Regulations for any purpose without the prior consent of the Alberta Queen's Printer.

The official Statutes and Regulations should be consulted for all purposes of interpreting and applying the law.

Official copies of Alberta legislation are available in print and electronic format from:

Alberta Queen's Printer, Edmonton
Main Floor, Park Plaza
10611 – 98 Avenue, Edmonton, Alberta T5K 2P7
Phone: (780) 427-4952 Fax: (780) 452-0668

Alberta Queen's Printer, Calgary
McDougall Centre
455 - 6 Street SW, Calgary, Alberta T2P 4E8
Phone: (403) 297-6251 Fax: (403) 297-8450

ALBERTA

Copyright of the Statutes and Regulations, whether in print or electronic format, belongs to the Province of Alberta. No person may reproduce copies of Alberta Statutes and Regulations for any purpose without the prior consent of the Alberta Queen's Printer.

The official Statutes and Regulations should be consulted for all purposes of interpreting and applying the law.

Official copies of Alberta legislation are available in print and electronic format from:

Alberta Queen's Printer, Edmonton
Main Floor, Park Plaza
10611 - 98 Avenue, Edmonton, Alberta T5K 2P7
Phone: (780) 427-4952 Fax: (780) 452-0668

Alberta Queen's Printer, Calgary
McDougall Centre
455 - 6 Street SW, Calgary, Alberta T2P 4E8
Phone: (403) 297-6251 Fax: (403) 297-8450

[illegible]

TABLE OF CONTENTS

LINEAR PROPERTY ASSESSMENT MANUAL

1.000 SCHEDULE A–BASE COST 1

1.001 LINEAR PROPERTY NOT DESCRIBED IN SCHEDULE A 1

1.001.100 Table 1–Cost Factors For Electric Power Systems 1
1.001.200 Table 2–Cost Factors For Telecommunication Systems* 2
1.001.300 Table 3–Cost Factors For Cable Television Systems 3
1.001.400 Table 4–Cost Factors For Pipeline 4

1.002 LINEAR PROPERTY DESCRIBED IN SCHEDULE A 4

1.003 ELECTRIC POWER SYSTEMS (ELE) 5

1.003.100 Electric Power Distribution Systems 5
1.003.200 Street Lighting 5
1.003.300 Oil and Gas Field Services 5
1.003.400 Electric Power Transmission Lines 5

1.004 TELECOMMUNICATION SYSTEMS 6

1.004.100 Cable Television Systems 6
1.004.200 Transmission and Distribution Line 6
1.004.300 Service Hookups 6
1.004.400 Cable Headend Equipment 6

1.005 DEFINITIONS 7

1.006 EXPLANATORY NOTES 8

1.007 PIPE (PL) 10

1.007.100 Gas Distribution System (GDS) 35
1.007.200 Single-Zone and Multi-Zone Wells (WL) 36

2.000 SCHEDULE B–ASSESSMENT YEAR MODIFIERS 37

2.001 ELECTRIC POWER SYSTEMS (EM) 37

2.002 TELECOMMUNICATION SYSTEMS (TM, CM) 37

2.003 PIPELINE (PL) 37

3.000 SCHEDULE C–DEPRECIATION 38

3.001 ELECTRIC POWER SYSTEMS DEPRECIATION 38

3.001.100 Substation Depreciation Factors 39
3.001.200 Generation Facilities–Depreciation Factors–All Wind Generation 40
3.001.210 Generation Facilities–Depreciation Factors–ATCO 41
3.001.220 Generation Facilities–Depreciation Factors–EPCOR 43
3.001.230 Generation Facilities–Depreciation Factors–TAU 44
3.001.300 Other Generation Facilities–Depreciation Factors–Less than 50 MegaWatt Units 47

3.001.400 Other Generation Facilities–Depreciation Factors– 50–100 MegaWatt Units 52
3.001.500 Other Generation Facilities–Depreciation Factors– Greater than 100 MegaWatt Units 57
3.001.500 Other Generation Facilities–Depreciation Factors– Greater than 100 MegaWatt Units (cont.) 58

3.002 STREET LIGHTING DEPRECIATION FACTORS 62

3.003 TELECOMMUNICATION SYSTEMS DEPRECIATION FACTORS 62

3.003.100 Telephone Systems 62
3.003.200 Cable Television Systems 62

3.004 PIPELINE DEPRECIATION FACTORS 62

4.000 SCHEDULE D–ADDITIONAL DEPRECIATION 63

4.001 ELECTRIC POWER SYSTEMS DEPRECIATION FACTORS 63

4.002 TELECOMMUNICATION SYSTEMS DEPRECIATION FACTORS 63

4.002.100 Cable Television Systems 63

4.003 PIPELINE (PL) 64

4.003.100 Pipe 64
4.003.200 Single-Zone and Multi-Zone Wells (WL) 65

5.000 SCHEDULE E–WELL SITE LAND (WS) 66

SUPPLEMENTAL INFORMATION I: 2002 CONSTRUCTION COST REPORTING GUIDE FOR REGULATED PROPERTY (APPENDIX V) 67

1.000 COSTS TO BE INCLUDED IN DETERMINING ASSESSABLE COSTS 69

1.100 DIRECT COSTS VERSUS INDIRECT COSTS 69

2.000 COSTS TO BE EXCLUDED IN DETERMINING ASSESSABLE COSTS 70

2.100 PRE-CONSTRUCTION AND POST-CONSTRUCTION COSTS 70

2.200 PRE-CONSTRUCTION ACTIVITIES 70

2.200.100 Feasibility Studies 70
2.200.200 Cancellation Charges 70

2.300 POST-CONSTRUCTION ACTIVITIES 71

2.300.100 Commissioning, Pre-production Runs, and Start up 71
2.300.200 Consumable Materials 71

2.400 PROPERTY THAT CANNOT BE ASSESSED 71

2.400.100 Royalties, Licenses, and Patent Fees 71

2.400.200 Mobile Equipment 71
2.400.300 Spare Equipment 71
2.400.400 Design Changes, Alterations, and Modifications 71
2.400.500 Interference Costs 71
2.400.600 Goods and Services Tax (GST) 72
2.400.700 Import Duty and Broker Fees 72
2.400.800 Bonus or Penalty 72
2.400.900 Computer Costs 72

2.500 PROPERTY EXEMPT FROM ASSESSMENT 72

2.600 ABNORMAL COSTS OF CONSTRUCTION 72

2.600.100 Travel Costs 72
2.600.200 Transportation Costs 73
2.600.300 Interest During Construction 73
2.600.400 Overtime 73
2.600.500 Property Taxes 73

GLOSSARY 75

FIGURE 1 FROM PROJECT COST TO BASE COST 77

SUPPLEMENTAL INFORMATION II: INTERPRETIVE GUIDE TO APPENDIX V 79

INTRODUCTION 81

SCOPE AND PURPOSE OF THIS GUIDE 81

REPORTING CONSTRUCTION COSTS 82

STANDARDS FOR REPORTING COSTS 82

STRUCTURES VERSUS MACHINERY COSTS 83

THE ASSESSOR'S AUTHORITY TO REQUEST INFORMATION 83

CONFIDENTIALITY OF INFORMATION 83

ASSESSABLE COSTS 84

FROM PROJECT COST TO ASSESSABLE COST 85

INCLUDED COSTS 87

DIRECT COSTS VERSUS INDIRECT COSTS 87

Consulting Fees 88
Working Models 88
Site Preparation 88
Freight Charges 88
Temporary Facilities 88
Testing 89
Site Improvements 89

Retaining Walls, Reinforced Earth Walls, and Earth Berms 89
Fire Protection 89
Communication Systems 89
Computer Costs 90
Standby Equipment 90
Cranes and Craneways 90

EXCLUDED COSTS 91

PRE-CONSTRUCTION AND POST-CONSTRUCTION COSTS 91

PRE-CONSTRUCTION ACTIVITIES 91

Feasibility Studies 91
Cancellation Charges 91

POST-CONSTRUCTION ACTIVITIES 91

Commissioning, Pre-Production Runs, and Start-up 91

PROPERTY THAT CANNOT BE ASSESSED 91

Royalties, Licenses, and Patent Fees 92
Mobile Equipment 92
Consumable Materials 92
Spare Equipment 92

PROPERTY EXEMPT FROM ASSESSMENT 92

Design Changes, Alterations, and Modifications 92
Interference Costs 93
Goods and Services Tax (GST) 93
Import Duty and Broker Fees 93
Bonus or Penalty 93
Computer Costs 93

ABNORMAL COSTS OF CONSTRUCTION 93

Travel Costs 94
Transportation Costs 94
Interest during Construction 94
Overtime 94
Property Taxes 94

GLOSSARY 95

REFERENCE 96

PREFACE CONSOLIDATION OF 2002 MINISTER'S GUIDELINES PART 2: ALBERTA LINEAR PROPERTY ASSESSMENT*

2.001 DEFINITIONS

In this Part,

(a) ***assessment year modifier***, means the factor which is applied to the base cost of linear property in order to adjust its base cost to the assessment year;

(b) ***base cost*** means the cost of an improvement, as prescribed in the *2002 Alberta Linear Property Assessment Manual*;

(c) ***linear property*** has the meaning given to it in the Act.

2.002 CALCULATION OF ASSESSMENT

The assessed value of linear property in a municipality, excluding wellsite land, shall be calculated by:

(a) establishing the base cost as prescribed in Schedule A of the *2002 Alberta Linear Property Assessment Manual*;

(b) multiplying the base cost by the appropriate Assessment Year Modifier prescribed in Schedule B of the *2002 Alberta Linear Property Assessment Manual*, to adjust the base cost to the assessment year;

(c) multiplying the amount determined in clause (b) by the appropriate depreciation factor prescribed in Schedule C of the *2002 Alberta Linear Property Assessment Manual*;

(d) if applicable, adjusting the amount determined in clause (c) for additional depreciation as prescribed in Schedule D of the *2002 Alberta Linear Property Assessment Manual*.

2.003 ASSESSED VALUE OF WELLSITE LAND

The assessed value of wellsite land shall be the amount prescribed in Schedule E of the *2002 Alberta Linear Property Assessment Manual.*

2.004 MINISTERIAL PRESCRIPTION

For the purposes of these Guidelines and section 2(b) of the Regulation, it is hereby prescribed that the cost of all computer software, including both basic software and applications software, intended for or used in connection with the monitoring, control or operation of any assessable property shall be included in the base cost of the property which is otherwise assessable.

*Please refer to the *Consolidation of 2002 Minister's Guidelines for Farm Land, Linear Property, Machinery and Equipment and Railway Assessment* for the complete text.

1.000 Schedule A–BASE COST

1.001 LINEAR PROPERTY NOT DESCRIBED IN SCHEDULE A

The cost factors in Table 1, 2, 3 and 4 and the formula below shall be used to determine the base cost for linear property that is *not* described in Schedule A.

Formula: Base Cost = ac X cf

Where ac = the cost of linear property determined in accordance with Appendix V of the *Minister's Guidelines*.

cf = is the factor to convert the cost of the linear property (ac) from the year it was constructed in, to its cost in 1994.

1.001.100 TABLE 1–COST FACTORS FOR ELECTRIC POWER SYSTEMS

Year of Construction	Cost Factor	Year of Construction	Cost Factor	Year of Construction	Cost Factor
1913	18.86	1943	9.77	1973	3.31
1914	19.51	1944	9.71	1974	2.93
1915	19.88	1945	9.63	1975	2.43
1916	18.35	1946	8.93	1976	2.14
1917	15.57	1947	8.30	1977	1.96
1918	13.56	1948	7.94	1978	1.78
1919	11.97	1949	7.95	1979	1.57
1920	9.80	1950	7.73	1980	1.40
1921	10.87	1951	6.94	1981	1.24
1922	11.78	1952	6.50	1982	1.16
1923	11.48	1953	6.12	1983	1.28
1924	11.61	1954	6.05	1984	1.34
1925	11.79	1955	6.00	1985	1.30
1926	11.89	1956	5.76	1986	1.30
1927	11.90	1957	5.56	1987	1.26
1928	11.62	1958	5.45	1988	1.24
1929	11.18	1959	5.39	1989	1.18
1930	11.57	1960	5.34	1990	1.13
1931	12.46	1961	5.30	1991	1.07
1932	13.43	1962	5.29	1992	1.05
1933	14.08	1963	5.26	1993	1.03
1934	13.87	1964	5.05	1994	1.00
1935	13.73	1965	4.86	1995	1.00
1936	13.34	1966	4.68	1996	1.00
1937	12.49	1967	4.29	1997	0.99
1938	12.72	1968	4.48	1998	0.98
1939	12.60	1969	4.39	1999	0.97
1940	11.96	1970	3.97	2000	0.97
1941	10.91	1971	3.82	2001	0.97
1942	9.99	1972	3.53	2002	0.96

1.001.200 TABLE 2–COST FACTORS FOR TELECOMMUNICATION SYSTEMS*

Year of Construction	Cost Factor	Year of Construction	Cost Factor	Year of Construction	Cost Factor
1913	18.86	1943	9.77	1973	3.31
1914	19.51	1944	9.71	1974	2.93
1915	19.88	1945	9.63	1975	2.43
1916	18.35	1946	8.93	1976	2.14
1917	15.57	1947	8.30	1977	1.96
1918	13.56	1948	7.94	1978	1.78
1919	11.97	1949	7.95	1979	1.57
1920	9.80	1950	7.73	1980	1.40
1921	10.87	1951	6.94	1981	1.24
1922	11.78	1952	6.50	1982	1.16
1923	11.48	1953	6.12	1983	1.15
1924	11.61	1954	6.05	1984	1.09
1925	11.79	1955	6.00	1985	1.05
1926	11.89	1956	5.76	1986	1.04
1927	11.90	1957	5.56	1987	1.00
1928	11.62	1958	5.45	1988	1.00
1929	11.18	1959	5.39	1989	0.98
1930	11.57	1960	5.34	1990	1.01
1931	12.46	1961	5.30	1991	0.97
1932	13.43	1962	5.29	1992	1.01
1933	14.08	1963	5.26	1993	0.98
1934	13.87	1964	5.05	1994	1.00
1935	13.73	1965	4.86	1995	1.00
1936	13.34	1966	4.68	1996	0.99
1937	12.49	1967	4.29	1997	0.99
1938	12.72	1968	4.48	1998	0.98
1939	12.60	1969	4.39	1999	1.03
1940	11.96	1970	3.97	2000	1.02
1941	10.91	1971	3.82	2001	1.01
1942	9.99	1972	3.53	2002	1.01

Note: Does not include Cable Television Systems.*

1.001.300 Table 3–Cost Factors For Cable Television Systems

Year of Construction	Cost Factor	Year of Construction	Cost Factor	Year of Construction	Cost Factor
1913	18.86	1943	9.77	1973	3.31
1914	19.51	1944	9.71	1974	2.93
1915	19.88	1945	9.63	1975	2.43
1916	18.35	1946	8.93	1976	2.14
1917	15.57	1947	8.30	1977	1.96
1918	13.56	1948	7.94	1978	1.78
1919	11.97	1949	7.95	1979	1.57
1920	9.80	1950	7.73	1980	1.40
1921	10.87	1951	6.94	1981	1.24
1922	11.78	1952	6.50	1982	1.16
1923	11.48	1953	6.12	1983	1.28
1924	11.61	1954	6.05	1984	1.34
1925	11.79	1955	6.00	1985	1.30
1926	11.89	1956	5.76	1986	1.30
1927	11.90	1957	5.56	1987	1.26
1928	11.62	1958	5.45	1988	1.24
1929	11.18	1959	5.39	1989	1.18
1930	11.57	1960	5.34	1990	1.13
1931	12.46	1961	5.30	1991	1.07
1932	13.43	1962	5.29	1992	1.05
1933	14.08	1963	5.26	1993	1.03
1934	13.87	1964	5.05	1994	1.00
1935	13.73	1965	4.86	1995	1.00
1936	13.34	1966	4.68	1996	1.00
1937	12.49	1967	4.29	1997	1.00
1938	12.72	1968	4.48	1998	0.99
1939	12.60	1969	4.39	1999	0.97
1940	11.96	1970	3.97	2000	0.99
1941	10.91	1971	3.82	2001	0.98
1942	9.99	1972	3.53	2002	0.97

1.001.400 TABLE 4–COST FACTORS FOR PIPELINE

Year of Construction	Cost Factor	Year of Construction	Cost Factor	Year of Construction	Cost Factor
1913	18.86	1943	9.77	1973	3.31
1914	19.51	1944	9.71	1974	2.93
1915	19.88	1945	9.63	1975	2.43
1916	18.35	1946	8.93	1976	2.14
1917	15.57	1947	8.30	1977	1.96
1918	13.56	1948	7.94	1978	1.78
1919	11.97	1949	7.95	1979	1.57
1920	9.80	1950	7.73	1980	1.40
1921	10.87	1951	6.94	1981	1.24
1922	11.78	1952	6.50	1982	1.16
1923	11.48	1953	6.12	1983	1.28
1924	11.61	1954	6.05	1984	1.34
1925	11.79	1955	6.00	1985	1.30
1926	11.89	1956	5.76	1986	1.30
1927	11.90	1957	5.56	1987	1.26
1928	11.62	1958	5.45	1988	1.24
1929	11.18	1959	5.39	1989	1.18
1930	11.57	1960	5.34	1990	1.13
1931	12.46	1961	5.30	1991	1.07
1932	13.43	1962	5.29	1992	1.05
1933	14.08	1963	5.26	1993	1.03
1934	13.87	1964	5.05	1994	1.00
1935	13.73	1965	4.86	1995	0.98
1936	13.34	1966	4.68	1996	0.97
1937	12.49	1967	4.29	1997	0.94
1938	12.72	1968	4.48	1998	0.91
1939	12.60	1969	4.39	1999	0.88
1940	11.96	1970	3.97	2000	0.88
1941	10.91	1971	3.82	2001	0.86
1942	9.99	1972	3.53	2002	0.85

1.002 LINEAR PROPERTY DESCRIBED IN SCHEDULE A

The rates in Schedule A reflect typical costs for field installations of component types in both urban and rural municipalities. These rates apply to each component type described below regardless of the exact configuration of the system.

The rates for property described in Schedule A must be used to determine the base cost for that property and no changes or adjustments to the rates are permissible.

The base cost for linear property described in Schedule A, Section 1.002 is determined as follows:

1) Select the property type.
2) Select the property component type.
3) Apply the formula associated with the property component type.

1.003 ELECTRIC POWER SYSTEMS (ELE)

1.003.100 ELECTRIC POWER DISTRIBUTION SYSTEMS

Formula: Base Cost = n X rate per customer hookup in each component type

Where n = the number of customer hookups in each component type

Code	Component Type	Rate Per Customer Hookup ($)
EDS 10	0 - 56 kVA or 0 - 50 kW	**700**
EDS 20	57 - 84 kVA or 51 – 76 kW	**1 500**
EDS 30	85 - 150 kVA or 77 – 135 kW	**9 000**
EDS 40	151 - 300 kVA or 136 - 270 kW	**13 000**
EDS 50	301 - 600 kVA or 271 - 540 kW	**24 000**
EDS 60	601 - 1 500 kVA or 541 - 1 350 kW	**45 000**
EDS 70	1 501 - 4 000 kVA or 1 351 - 3 600 kW	**65 000**
EDS 80	4 001 - 6 700 kVA or 3 601 - 6 000 kW	**105 000**

1.003.200 STREET LIGHTING

Formula: Base Cost = n X rate per pole of the component type

Where n = the number of poles of the component type

Code	Component Type	Rate Per Pole ($)
ESL 10	All types and Sizes	**800**

Component Type typically includes:

- poles and fixtures
- installation

1.003.300 OIL AND GAS FIELD SERVICES

Formula: Base Cost = n X rate per customer hookup of the component type

Where n = the number of customer hookups of the component type

Code	Component Type	Rate Per Customer Hookup($)
EFS 10	Oil & Gas Service	**7 950**

1.003.400 ELECTRIC POWER TRANSMISSION LINES

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type	Rate Per Kilometre ($)
ET 10	Single Circuit–60 to 75 kV	**30 000**
ET 20	Single Circuit–76 to 150 kV	**35 500**
ET 30	Single Circuit–151 to 250 kV	**84 500**
ET 40	Single Circuit–251 to 500 kV	**198 000**
ET 50	Double Circuit–60 to 75 kV	**19 000**
ET 60	Double Circuit–76 to 150 kV	**23 000**
ET 70	Double Circuit–151 to 250 kV	**34 000**

1.004 TELECOMMUNICATION SYSTEMS

1.004.100 Cable Television Systems

1.004.200 Transmission and Distribution Line

Formula: Base Cost = n X rate per metre in each component type

Where n = length in metre(s) in each component type

Code	Component Type:	Rate Per Metre ($)
CTD 10	Trunk Line 0 to 13mm	**6.17**
CTD 20	Trunk Line 14 to 19 mm	**7.00**
CTD 30	Trunk Line 20 to 25 mm	**8.85**
CTD 40	Joint Trunk Line 13 mm with 13 mm Distribution Line	**10.56**
CTD 50	Joint Trunk Line 19 mm with 13 mm Distribution Line	**11.15**
CTD 60	Additional Trunk Line to existing Trunk Line 13 mm	**3.08**
CTD 70	Additional Trunk Line to existing Trunk Line 19 mm	**3.50**
CTD 80	Additional Trunk Line to existing Trunk Line 25 mm	**4.42**
CTD 90	Distribution Line 10 mm	**8.55**
CTD 100	Distribution Line 13 mm	**8.70**

1.004.300 Service Hookups

Formula: Base Cost = n X rate per customer hookup in each component type

Where n = the number of customer hookups in each component type

Code	Component Type	Rate Per Customer Hookup ($)
CSH 10	Single Service Drop	**45.00**
CSH 20	Service Drops Within a building	**32.00**

1.004.400 Cable Headend Equipment

Formula: Base Cost = n X rate per channel in the applicable component type

Where n = number of channels in the applicable component type

Code	Component Type	Rate Per Channel ($)
CHD 10	Under 2 000 Subscribers	**1 000**
CHD 20	2 001 to 6 000 Subscribers	**2 000**
CHD 30	Over 6 000 Subscribers	**5 000**

Note: Rates are based on a 6 MHz analog channel.

1.005 DEFINITIONS

In this manual, the following definitions apply:

(a) ***AEUB*** refers to the Alberta Energy and Utilities Board. (see 1.006 Explanatory Notes)

(b) ***Abandoned*** is the status of a well as determined by the record at the AEUB.

(c) ***Area 1*** – (depreciation Code A1) is defined as pipe having a diameter greater than 246.2 mm and contained within the boundaries of Canadian Forces Base Suffield.

(d) ***Chronological age*** is the actual number of years elapsed from the year the linear property was built, to the assessment year.

(e) ***Deemed Age*** is chronological or effective age, as determined by the assessor.

(f) ***Deepest producible zone*** is the depth of the well used to calculate base cost.

(g) ***Discontinued*** (depreciation Code D) is the status of pipe as determined by the record at the AEUB.

(h) ***Drilled and cased*** is the status of a well as determined by the record at the AEUB.

(i) ***Effective age*** refers to the estimated age of generation plants and substations based on its present condition, design features and engineer amenities. Effective age may be less than, equal to, or greater than actual age. Effective age is determined by examining the present condition, design features and engineer amenities of comparable types of generation plants and substations.

(j) ***Gas distribution system*** means a pipeline or a system of pipelines designed, constructed, and operated for the distribution of gas to consumers in the immediate area, but does not include a gas conveyance pipeline licenced to operate under the *Pipeline Act.*

(k) ***High pressure*** means design pressure 6 900 kPa (1 000 psi) or greater as determined by the record at the AEUB or by the National Energy Board.

(l) ***Low pressure*** means design pressure less than 6 900 kPa (1 000 psi), as determined by the record at the AEUB or as determined by the assessor.

(m) ***Non-producing well*** means a well for which an assessment is prepared but did not produce for the period of 12 months before October 31 of the assessment year as determined by the record at the AEUB. A non-producing well does not include wells with an “Abandoned” status at the AEUB.

(n) ***Operational*** is the status of a pipe as determined by the record at the AEUB.

(o) ***Operator*** has the meaning given to it by the Act.

(p) ***Plug back depth*** has the meaning given to it by the AEUB.

(q) ***Permitted*** is the status of a pipe as determined by the record at the AEUB.

(r) ***Pool code*** is the code found on the well record and has the meaning given to it by the AEUB.

(s) ***Producing interval*** has the meaning given to it by the AEUB.

(t) ***Shoe set depth*** has the meaning given to it by the AEUB.

(u) ***Storage*** is the status of a well as determined by the record at the AEUB.

(v) ***Suspended*** is the status of a well as determined by the record at the AEUB.

(w) ***True vertical depth*** has the meaning given to it by the AEUB.

(x) ***Well site*** means the area of land associated with a well.

(y) ***Well status*** is the status of a well as determined by the record at the AEUB.

(z) ***Zone*** has the meaning given to it in the *Oil and Gas Conservation Act.*

1.006 EXPLANATORY NOTES

AEUB Terms and Statuses

The following terms and statuses may appear in the *Pipe Detail Report* which forms part of the *Linear Property Assessment Notice.* The terms and statutes are taken from the AEUB and have the meaning given to them by the AEUB:

(a) Confidential
(b) Confidential Below
(c) Event Sequence Number
(d) Licence Number
(e) Line Number
(f) Non-confidential
(g) Pipe Status
(h) Tour Casing.

Additional information can be obtained from AEUB Guides 7, 56 and 59. These Guides are available at http://www.eub.gov.ab.ca/BBS/requirements/Guides/guides.htm.

Deepest Producible Zone Calculation

Well depth will be calculated based on one of the following variables as determined by the record at the AEUB:

- Shoe set depth, true vertical depth, plug back depth or midpoint of the deepest producing interval. The variable chosen for the calculation will be the variable with the minimum value greater than zero.

Well Bore Fluid Conversion

For ***Well Status Fluid*** the assessor will use the following formula to bring fluids produced from the well bore to one common fluid type and use the cumulative total when applying depreciation under Section 4.003.200:

- Oil to Gas–m^3 multiplied by 1.781 multiplied by 10^3
- Gas to Oil–10^3m^3 divided by 1.781

Changing Status of Pipeline (Pipe)

1) An assessment may be prepared for a pipeline shown on the record of the AEUB as having a ***permitted*** status if the assessor determines that the pipeline meets the requirements in Section 291(2)(a) of the *Municipal Government Act.*
2) If an assessor determines that a pipeline with an ***operational*** status at the AEUB does not meet the requirements of Section 291(2)(a) of the *Municipal Government Act* the assessor will:
    - not prepare an assessment, or,
    - where an assessment has been prepared, the assessor will remove the assessment from the record and record an "R" in the status field of the *Pipe Detail Report* to indicate that the record has been removed.

(cont.)

3) For pipeline with an operational status at the AEUB that
   - has a "From" facility code of WE **and**
   - has a "From" legal location description with the same LSD, Section, Township, Range and Meridian that contains a non-producing well as defined in the *2002 Linear Property Assessment Manual*

   the assessor will record "W" in the status field for the purpose of applying depreciation.

4) For pipeline with an operational status at the AEUB that is within the boundaries of Canadian Forces Base Suffield only, the assessor shall record an A1 in the status field for the purpose of applying depreciation to that pipe having a diameter greater than 246.2 mm unless any of the other depreciation factors in table 4.003.100 are applicable. In this case the depreciation factor that allows the greatest amount of depreciation shall apply.

Pipe Material Codes

The following chart will be used by the assessor to determine equivalencies for pipe materials identified in AEUB Guide 56, Table 3.2 and other Pipe Material Codes (identified by *) that are allowed to be entered into the record at the AEUB.

Pipe Material	Code	Equivalency	Code
Aluminium	A	Aluminium	A
Poly Butylenes *	B	Polyethylene	P
Cellulose Acetate	C	Polyethylene	P
Fiberglass	F	Fiberglass	F
Composite	G	Steel	S
Asbestos Cement *	H	Polyethylene	P
Cast Iron *	N	Steel	S
Polyethylene	P	Polyethylene	P
Non Certified	R	Polyethylene	P
Steel	S	Steel	S
Unknown *	U	Polyethylene	P
Polyvinyl Chloride	V	Polyvinyl Chloride	V

Single-Zone and Multi-Zone Wells

In this section, the assessment of pipeline that is standardized well pipe, and wellhead installations in or on a well for which a licence is required under the *Oil and Gas Conservation Act*, shall be determined according to Section 1.007.200 of this manual.

***Assessment Commissioner's Bulletins* No. 4/83 and 2/86**

These Bulletins are not prescribed by Statute or regulation. The Bulletins are not relevant to well assessment and are not to be used or considered by the assessor when preparing linear assessments.

1.007 PIPE (PL)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type Material	 Substance	 Size Range mm (pressure)	Rate Per Kilometre ($)
10	Steel	Crude Oil	0 to 24.0(LP)	**14 300**
11	Steel	Crude Oil	0 to 24.0(HP)	**15 800**
20	Steel	Crude Oil	24.1 to 30.1(LP)	**15 000**
21	Steel	Crude Oil	24.1 to 30.1(HP)	**16 400**
30	Steel	Crude Oil	30.2 to 37.8(LP)	**15 700**
31	Steel	Crude Oil	30.2 to 37.8(HP)	**17 100**
40	Steel	Crude Oil	37.9 to 45.3(LP)	**17 400**
41	Steel	Crude Oil	37.9 to 45.3(HP)	**19 100**
50	Steel	Crude Oil	45.4 to 54.3(LP)	**17 400**
51	Steel	Crude Oil	45.4 to 54.3(HP)	**19 100**
60	Steel	Crude Oil	54.4 to 74.6(LP)	**25 300**
61	Steel	Crude Oil	54.4 to 74.6(HP)	**26 200**
70	Steel	Crude Oil	74.7 to 101.6(LP)	**31 100**
71	Steel	Crude Oil	74.7 to 101.6(HP)	**32 100**
80	Steel	Crude Oil	101.7 to 141.3(LP)	**39 800**
81	Steel	Crude Oil	101.7 to 141.3(HP)	**40 900**
90	Steel	Crude Oil	141.4 to 193.7(LP)	**50 800**
91	Steel	Crude Oil	141.4 to 193.7(HP)	**58 100**
100	Steel	Crude Oil	193.8 to 246.1(LP)	**64 500**
101	Steel	Crude Oil	193.8 to 246.1(HP)	**78 800**
110	Steel	Crude Oil	246.2 to 298.5(LP)	**75 900**
111	Steel	Crude Oil	246.2 to 298.5(HP)	**92 800**
120	Steel	Crude Oil	298.6 to 339.8(LP)	**87 800**
121	Steel	Crude Oil	298.6 to 339.8(HP)	**105 600**
130	Steel	Crude Oil	339.9 to 381.0(LP)	**107 900**
131	Steel	Crude Oil	339.9 to 381.0(HP)	**126 100**
140	Steel	Crude Oil	381.1 to 431.7(LP)	**130 400**
141	Steel	Crude Oil	381.1 to 431.7(HP)	**149 000**
150	Steel	Crude Oil	431.8 to 482.5(LP)	**164 400**
151	Steel	Crude Oil	431.8 to 482.5(HP)	**182 200**
160	Steel	Crude Oil	482.6 to 533.5(LP)	**188 700**
161	Steel	Crude Oil	482.6 to 533.5(HP)	**199 600**
170	Steel	Crude Oil	533.6 to 584.5(LP)	**204 600**
171	Steel	Crude Oil	533.6 to 584.5(HP)	**231 600**
180	Steel	Crude Oil	584.6 to 635.0(LP)	**257 200**
181	Steel	Crude Oil	584.6 to 635.0(HP)	**275 300**
190	Steel	Crude Oil	635.1 to 685.5(LP)	**284 300**
191	Steel	Crude Oil	635.1 to 685.5(HP)	**300 700**
200	Steel	Crude Oil	685.6 to 736.5(LP)	**300 400**
201	Steel	Crude Oil	685.6 to 736.5(HP)	**333 000**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type Material	Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
210	Steel	Crude Oil	736.6 to 787.5(LP)	**337 500**
211	Steel	Crude Oil	736.6 to 787.5(HP)	**374 800**
220	Steel	Crude Oil	787.6 to 838.5(LP)	**373 100**
221	Steel	Crude Oil	787.6 to 838.5(HP)	**396 700**
230	Steel	Crude Oil	838.6 to 889.0(LP)	**390 400**
231	Steel	Crude Oil	838.6 to 889.0(HP)	**433 800**
240	Steel	Crude Oil	889.1 to 990.5(LP)	**432 700**
241	Steel	Crude Oil	889.1 to 990.5(HP)	**480 300**
250	Steel	Crude Oil	990.6 to 1143.0(LP)	**517 900**
251	Steel	Crude Oil	990.6 to 1143.0(HP)	**570 600**
260	Steel	Crude Oil	1143.1 to 1320.5(LP)	**653 800**
261	Steel	Crude Oil	1143.1 to 1320.5(HP)	**741 300**
270	Steel	Crude Oil	1320.6 to 1523.5(LP)	**891 900**
271	Steel	Crude Oil	1320.6 to 1523.5(HP)	**1 005 100**
280	Steel	Sour Natural Gas	0 to 24.0(HP)	**15 800**
281	Steel	Sour Natural Gas	0 to 24.0(LP)	**14 300**
290	Steel	Sour Natural Gas	24.1 to 30.1(HP)	**16 400**
291	Steel	Sour Natural Gas	24.1 to 30.1(LP)	**15 000**
300	Steel	Sour Natural Gas	30.2 to 37.8(HP)	**17 100**
301	Steel	Sour Natural Gas	30.2 to 37.8(LP)	**15 700**
310	Steel	Sour Natural Gas	37.9 to 45.3(HP)	**19 100**
311	Steel	Sour Natural Gas	37.9 to 45.3(LP)	**17 400**
320	Steel	Sour Natural Gas	45.4 to 54.3(HP)	**19 100**
321	Steel	Sour Natural Gas	45.4 to 54.3(LP)	**17 400**
340	Steel	Sour Natural Gas	54.4 to 74.6(HP)	**26 200**
341	Steel	Sour Natural Gas	54.4 to 74.6(LP)	**25 300**
350	Steel	Sour Natural Gas	74.7 to 101.6(HP)	**32 100**
351	Steel	Sour Natural Gas	74.7 to 101.6(LP)	**31 100**
360	Steel	Sour Natural Gas	101.7 to 141.3(HP)	**40 900**
361	Steel	Sour Natural Gas	101.7 to 141.3(LP)	**39 800**
370	Steel	Sour Natural Gas	141.4 to 193.7(HP)	**58 100**
371	Steel	Sour Natural Gas	141.4 to 193.7(LP)	**50 800**
380	Steel	Sour Natural Gas	193.8 to 246.1(HP)	**78 800**
381	Steel	Sour Natural Gas	193.8 to 246.1(LP)	**64 500**
390	Steel	Sour Natural Gas	246.2 to 298.5(HP)	**92 800**
391	Steel	Sour Natural Gas	246.2 to 298.5(LP)	**75 900**
400	Steel	Sour Natural Gas	298.6 to 339.8(HP)	**105 600**
401	Steel	Sour Natural Gas	298.6 to 339.8(LP)	**87 800**
410	Steel	Sour Natural Gas	339.9 to 381.0(HP)	**126 100**
411	Steel	Sour Natural Gas	339.9 to 381.0(LP)	**107 900**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type Material	Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
420	Steel	Sour Natural Gas	381.1 to 431.7(HP)	**149 000**
421	Steel	Sour Natural Gas	381.1 to 431.7(LP)	**130 400**
430	Steel	Sour Natural Gas	431.8 to 482.5(HP)	**182 200**
431	Steel	Sour Natural Gas	431.8 to 482.5(LP)	**164 400**
440	Steel	Sour Natural Gas	482.6 to 533.5(HP)	**199 600**
441	Steel	Sour Natural Gas	482.6 to 533.5(LP)	**188 700**
450	Steel	Sour Natural Gas	533.6 to 584.5(HP)	**231 600**
451	Steel	Sour Natural Gas	533.6 to 584.5(LP)	**204 600**
460	Steel	Sour Natural Gas	584.6 to 635.0(HP)	**275 300**
461	Steel	Sour Natural Gas	584.6 to 635.0(LP)	**257 200**
470	Steel	Sour Natural Gas	635.1 to 685.5(HP)	**300 700**
471	Steel	Sour Natural Gas	635.1 to 685.5(LP)	**284 300**
480	Steel	Sour Natural Gas	685.6 to 736.5(HP)	**333 000**
481	Steel	Sour Natural Gas	685.6 to 736.5(LP)	**300 400**
490	Steel	Sour Natural Gas	736.6 to 787.5(HP)	**374 800**
491	Steel	Sour Natural Gas	736.6 to 787.5(LP)	**337 500**
500	Steel	Sour Natural Gas	787.6 to 838.5(HP)	**396 700**
501	Steel	Sour Natural Gas	787.6 to 838.5(LP)	**373 100**
510	Steel	Sour Natural Gas	838.6 to 889.0(HP)	**433 800**
511	Steel	Sour Natural Gas	838.6 to 889.0(LP)	**390 400**
520	Steel	Sour Natural Gas	889.1 to 990.5(HP)	**480 300**
521	Steel	Sour Natural Gas	889.1 to 990.5(LP)	**432 700**
530	Steel	Sour Natural Gas	990.6 to 1143.0(HP)	**570 600**
531	Steel	Sour Natural Gas	990.6 to 1143.0(LP)	**517 900**
540	Steel	Sour Natural Gas	1143.1 to 1320.5(HP)	**741 300**
541	Steel	Sour Natural Gas	1143.1 to 1320.5(LP)	**653 800**
550	Steel	Sour Natural Gas	1320.6 to 1523.5(HP)	**1 005 100**
551	Steel	Sour Natural Gas	1320.6 to 1523.5(LP)	**891 900**
560	Steel	Fuel Gas	0 to 24.0(HP)	**15 800**
561	Steel	Fuel Gas	0 to 24.0(LP)	**14 300**
570	Steel	Fuel Gas	24.1 to 30.1(HP)	**16 400**
571	Steel	Fuel Gas	24.1 to 30.1(LP)	**15 300**
580	Steel	Fuel Gas	30.2 to 37.8(HP)	**17 100**
581	Steel	Fuel Gas	30.2 to 37.8(LP)	**15 700**
590	Steel	Fuel Gas	37.9 to 45.3(HP)	**19 100**
591	Steel	Fuel Gas	37.9 to 45.3(LP)	**17 400**
600	Steel	Fuel Gas	45.4 to 54.3(HP)	**19 100**
601	Steel	Fuel Gas	45.4 to 54.3(LP)	**17 400**
610	Steel	Fuel Gas	54.4 to 74.6(HP)	**26 200**
611	Steel	Fuel Gas	54.4 to 74.6(LP)	**25 300**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
620	Steel	Fuel Gas	74.7 to 101.6(HP)	**32 100**
621	Steel	Fuel Gas	74.7 to 101.6(LP)	**31 100**
630	Steel	Fuel Gas	101.7 to 141.3(HP)	**40 900**
631	Steel	Fuel Gas	101.7 to 141.3(LP)	**39 800**
640	Steel	Fuel Gas	141.4 to 193.7(HP)	**58 100**
641	Steel	Fuel Gas	141.4 to 193.7(LP)	**50 800**
650	Steel	Fuel Gas	193.8 to 246.1(HP)	**78 800**
651	Steel	Fuel Gas	193.8 to 246.1(LP)	**64 500**
660	Steel	Fuel Gas	246.2 to 298.5(HP)	**92 800**
661	Steel	Fuel Gas	246.2 to 298.5(LP)	**75 900**
670	Steel	Fuel Gas	298.6 to 339.8(HP)	**105 600**
671	Steel	Fuel Gas	298.6 to 339.8(LP)	**87 800**
680	Steel	Fuel Gas	339.9 to 381.0(HP)	**126 100**
681	Steel	Fuel Gas	339.9 to 381.0(LP)	**107 900**
690	Steel	Fuel Gas	381.1 to 431.7(HP)	**149 000**
691	Steel	Fuel Gas	381.1 to 431.7(LP)	**130 400**
700	Steel	Fuel Gas	431.8 to 482.5(HP)	**182 200**
701	Steel	Fuel Gas	431.8 to 482.5(LP)	**164 400**
710	Steel	Fuel Gas	482.6 to 533.5(HP)	**199 600**
711	Steel	Fuel Gas	482.6 to 533.5(LP)	**188 700**
720	Steel	Fuel Gas	533.6 to 584.5(HP)	**231 600**
721	Steel	Fuel Gas	533.6 to 584.5(LP)	**204 600**
730	Steel	Fuel Gas	584.6 to 635.0(HP)	**275 300**
731	Steel	Fuel Gas	584.6 to 635.0(LP)	**257 200**
740	Steel	Fuel Gas	635.1 to 685.5(HP)	**300 700**
741	Steel	Fuel Gas	635.1 to 685.5(LP)	**284 300**
750	Steel	Fuel Gas	685.6 to 736.5(HP)	**333 000**
751	Steel	Fuel Gas	685.6 to 736.5(LP)	**300 400**
760	Steel	Fuel Gas	736.6 to 787.5(HP)	**374 800**
761	Steel	Fuel Gas	736.6 to 787.5(LP)	**337 500**
770	Steel	Fuel Gas	787.6 to 838.5(HP)	**396 700**
771	Steel	Fuel Gas	787.6 to 838.5(LP)	**373 100**
780	Steel	Fuel Gas	838.6 to 889.0(HP)	**433 800**
781	Steel	Fuel Gas	838.6 to 889.0(LP)	**390 400**
790	Steel	Fuel Gas	889.1 to 990.5(HP)	**480 300**
791	Steel	Fuel Gas	889.1 to 990.5(LP)	**432 700**
800	Steel	Fuel Gas	990.6 to 1143.0(HP)	**570 600**
801	Steel	Fuel Gas	990.6 to 1143.0(LP)	**517 900**
810	Steel	Fuel Gas	1143.1 to 1320.5(HP)	**741 300**
811	Steel	Fuel Gas	1143.1 to 1320.5(LP)	**653 800**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
820	Steel	Fuel Gas	1320.6 to 1523.5(HP)	**1 005 100**
821	Steel	Fuel Gas	1320.6 to 1523.5(LP)	**891 900**
830	Steel	Fresh Water	0 to 24.0(LP)	**14 300**
831	Steel	Fresh Water	0 to 24.0(HP)	**15 800**
840	Steel	Fresh Water	24.1 to 30.1(LP)	**15 000**
841	Steel	Fresh Water	24.1 to 30.1(HP)	**16 400**
850	Steel	Fresh Water	30.2 to 37.8(LP)	**15 700**
851	Steel	Fresh Water	30.2 to 37.8(HP)	**17 100**
860	Steel	Fresh Water	37.9 to 45.3(LP)	**17 400**
861	Steel	Fresh Water	37.9 to 45.3(HP)	**19 100**
870	Steel	Fresh Water	45.4 to 54.3(LP)	**17 400**
871	Steel	Fresh Water	45.4 to 54.3(HP)	**19 100**
880	Steel	Fresh Water	54.4 to 74.6(LP)	**25 300**
881	Steel	Fresh Water	54.4 to 74.6(HP)	**26 200**
890	Steel	Fresh Water	74.7 to 101.6(LP)	**31 100**
891	Steel	Fresh Water	74.7 to 101.6(HP)	**32 100**
900	Steel	Fresh Water	101.7 to 141.3(LP)	**39 800**
901	Steel	Fresh Water	101.7 to 141.3(HP)	**40 900**
910	Steel	Fresh Water	141.4 to 193.7(LP)	**50 800**
911	Steel	Fresh Water	141.4 to 193.7(HP)	**58 100**
920	Steel	Fresh Water	193.8 to 246.1(LP)	**64 500**
921	Steel	Fresh Water	193.8 to 246.1(HP)	**78 800**
930	Steel	Fresh Water	246.2 to 298.5(LP)	**75 900**
931	Steel	Fresh Water	246.2 to 298.5(HP)	**92 800**
940	Steel	Fresh Water	298.6 to 339.8(LP)	**87 800**
941	Steel	Fresh Water	298.6 to 339.8(HP)	**105 600**
950	Steel	Fresh Water	339.9 to 381.0(LP)	**107 900**
951	Steel	Fresh Water	339.9 to 381.0(HP)	**126 100**
960	Steel	Fresh Water	381.1 to 431.7(LP)	**130 400**
961	Steel	Fresh Water	381.1 to 431.7(HP)	**149 000**
970	Steel	Fresh Water	431.8 to 482.5(LP)	**164 400**
971	Steel	Fresh Water	431.8 to 482.5(HP)	**182 200**
980	Steel	Fresh Water	482.6 to 533.5(LP)	**188 700**
981	Steel	Fresh Water	482.6 to 533.5(HP)	**199 600**
990	Steel	Fresh Water	533.6 to 584.5(LP)	**204 600**
991	Steel	Fresh Water	533.6 to 584.5(HP)	**231 600**
1000	Steel	Fresh Water	584.6 to 635.0(LP)	**257 200**
1001	Steel	Fresh Water	584.6 to 635.0(HP)	**275 300**
1010	Steel	Fresh Water	635.1 to 685.5(LP)	**284 300**
1011	Steel	Fresh Water	635.1 to 685.5(HP)	**300 700**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
1020	Steel	Fresh Water	685.6 to 736.5(LP)	**300 400**
1021	Steel	Fresh Water	685.6 to 736.5(HP)	**333 000**
1030	Steel	Fresh Water	736.6 to 787.5(LP)	**337 500**
1031	Steel	Fresh Water	736.6 to 787.5(HP)	**374 800**
1040	Steel	Fresh Water	787.6 to 838.5(LP)	**373 100**
1041	Steel	Fresh Water	787.6 to 838.5(HP)	**396 700**
1050	Steel	Fresh Water	838.6 to 889.0(LP)	**390 400**
1051	Steel	Fresh Water	838.6 to 889.0(HP)	**433 800**
1060	Steel	Fresh Water	889.1 to 990.5(LP)	**432 700**
1061	Steel	Fresh Water	889.1 to 990.5(HP)	**480 300**
1070	Steel	Fresh Water	990.6 to 1143.0(LP)	**517 900**
1071	Steel	Fresh Water	990.6 to 1143.0(HP)	**570 600**
1080	Steel	Fresh Water	1143.1 to 1320.5(LP)	**653 800**
1081	Steel	Fresh Water	1143.1 to 1320.5(HP)	**741 300**
1090	Steel	Fresh Water	1320.6 to 1523.5(LP)	**891 900**
1091	Steel	Fresh Water	1320.6 to 1523.5(HP)	**1 005 100**
1100	Steel	HVP Products	0 to 24.0(HP)	**15 800**
1101	Steel	HVP Products	0 to 24.0(LP)	**14 300**
1110	Steel	HVP Products	24.1 to 30.1(HP)	**16 400**
1111	Steel	HVP Products	24.1 to 30.1(LP)	**15 000**
1120	Steel	HVP Products	30.2 to 37.8(HP)	**17 100**
1121	Steel	HVP Products	30.2 to 37.8(LP)	**15 700**
1130	Steel	HVP Products	37.9 to 45.3(HP)	**19 100**
1131	Steel	HVP Products	37.9 to 45.3(LP)	**17 400**
1140	Steel	HVP Products	45.4 to 54.3(HP)	**19 100**
1141	Steel	HVP Products	45.4 to 54.3(LP)	**17 400**
1150	Steel	HVP Products	54.4 to 74.6(HP)	**26 200**
1151	Steel	HVP Products	54.4 to 74.6(LP)	**25 300**
1160	Steel	HVP Products	74.7 to 101.6(HP)	**32 100**
1161	Steel	HVP Products	74.7 to 101.6(LP)	**31 100**
1170	Steel	HVP Products	101.7 to 141.3(HP)	**40 900**
1171	Steel	HVP Products	101.7 to 141.3(LP)	**39 800**
1180	Steel	HVP Products	141.4 to 193.7(HP)	**58 100**
1181	Steel	HVP Products	141.4 to 193.7(LP)	**50 800**
1190	Steel	HVP Products	193.8 to 246.1(HP)	**78 800**
1191	Steel	HVP Products	193.8 to 246.1(LP)	**64 500**
1200	Steel	HVP Products	246.2 to 298.5(HP)	**92 800**
1201	Steel	HVP Products	246.2 to 298.5(LP)	**75 900**
1210	Steel	HVP Products	298.6 to 339.8(HP)	**105 600**
1211	Steel	HVP Products	298.6 to 339.8(LP)	**87 800**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type
Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
1220	Steel	HVP Products	339.9 to 381.0(HP)	**126 100**
1221	Steel	HVP Products	339.9 to 381.0(LP)	**107 900**
1230	Steel	HVP Products	381.1 to 431.7(HP)	**149 000**
1231	Steel	HVP Products	381.1 to 431.7(LP)	**130 400**
1240	Steel	HVP Products	431.8 to 482.5(HP)	**182 200**
1241	Steel	HVP Products	431.8 to 482.5(LP)	**164 400**
1250	Steel	HVP Products	482.6 to 533.5(HP)	**199 600**
1251	Steel	HVP Products	482.6 to 533.5(LP)	**188 700**
1260	Steel	HVP Products	533.6 to 584.5(HP)	**231 600**
1261	Steel	HVP Products	533.6 to 584.5(LP)	**204 600**
1270	Steel	HVP Products	584.6 to 635.0(HP)	**275 300**
1271	Steel	HVP Products	584.6 to 635.0(LP)	**257 200**
1280	Steel	HVP Products	635.1 to 685.5(HP)	**300 700**
1281	Steel	HVP Products	635.1 to 685.5(LP)	**284 300**
1290	Steel	HVP Products	685.6 to 736.5(HP)	**333 000**
1291	Steel	HVP Products	685.6 to 736.5(LP)	**300 400**
1300	Steel	HVP Products	736.6 to 787.5(HP)	**374 800**
1301	Steel	HVP Products	736.6 to 787.5(LP)	**337 500**
1310	Steel	HVP Products	787.6 to 838.5(HP)	**396 700**
1311	Steel	HVP Products	787.6 to 838.5(LP)	**373 100**
1320	Steel	HVP Products	838.6 to 889.0(HP)	**433 800**
1321	Steel	HVP Products	838.6 to 889.0(LP)	**390 400**
1330	Steel	HVP Products	889.1 to 990.5(HP)	**480 300**
1331	Steel	HVP Products	889.1 to 990.5(LP)	**432 700**
1340	Steel	HVP Products	990.6 to 1143.0(HP)	**570 600**
1341	Steel	HVP Products	990.6 to 1143.0(LP)	**517 900**
1350	Steel	HVP Products	1143.1 to 1320.5(HP)	**741 300**
1351	Steel	HVP Products	1143.1 to 1320.5(LP)	**653 800**
1360	Steel	HVP Products	1320.6 to 1523.5(HP)	**1 005 100**
1361	Steel	HVP Products	1320.6 to 1523.5(LP)	**891 900**
1365	Steel	HVP Products	1523.6 to 1726.5 (HP)	**1 005 100**
1366	Steel	HVP Products	1523.6 to 1726.5 (LP)	**891 900**
1370	Steel	LVP Products	0 to 24.0(LP)	**14 300**
1371	Steel	LVP Products	0 to 24.0(HP)	**15 800**
1380	Steel	LVP Products	24.1 to 30.1(LP)	**15 000**
1381	Steel	LVP Products	24.1 to 30.1(HP)	**16 400**
1390	Steel	LVP Products	30.2 to 37.8(LP)	**15 700**
1391	Steel	LVP Products	30.2 to 37.8(HP)	**17 100**
1400	Steel	LVP Products	37.9 to 45.3(LP)	**17 400**
1401	Steel	LVP Products	37.9 to 45.3(HP)	**19 100**
1410	Steel	LVP Products	45.4 to 54.3(LP)	**17 400**
1411	Steel	LVP Products	45.4 to 54.3(HP)	**19 100**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type Material	Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
1420	Steel	LVP Products	54.4 to 74.6(LP)	**25 300**
1421	Steel	LVP Products	54.4 to 74.6(HP)	**26 200**
1430	Steel	LVP Products	74.7 to 101.6(LP)	**31 100**
1431	Steel	LVP Products	74.7 to 101.6(HP)	**32 100**
1440	Steel	LVP Products	101.7 to 141.3(LP)	**39 800**
1441	Steel	LVP Products	101.7 to 141.3(HP)	**40 900**
1450	Steel	LVP Products	141.4 to 193.7(LP)	**50 800**
1451	Steel	LVP Products	141.4 to 193.7(HP)	**58 100**
1460	Steel	LVP Products	193.8 to 246.1(LP)	**64 500**
1461	Steel	LVP Products	193.8 to 246.1(HP)	**78 800**
1470	Steel	LVP Products	246.2 to 298.5(LP)	**75 900**
1471	Steel	LVP Products	246.2 to 298.5(HP)	**92 800**
1480	Steel	LVP Products	298.6 to 339.8(LP)	**87 800**
1481	Steel	LVP Products	298.6 to 339.8(HP)	**105 600**
1490	Steel	LVP Products	339.9 to 381.0(LP)	**107 900**
1491	Steel	LVP Products	339.9 to 381.0(HP)	**126 100**
1500	Steel	LVP Products	381.1 to 431.7(LP)	**130 400**
1501	Steel	LVP Products	381.1 to 431.7(HP)	**149 000**
1510	Steel	LVP Products	431.8 to 482.5(LP)	**164 400**
1511	Steel	LVP Products	431.8 to 482.5(HP)	**182 200**
1520	Steel	LVP Products	482.6 to 533.5(LP)	**188 700**
1521	Steel	LVP Products	482.6 to 533.5(HP)	**199 600**
1530	Steel	LVP Products	533.6 to 584.5(LP)	**204 600**
1531	Steel	LVP Products	533.6 to 584.5(HP)	**231 600**
1540	Steel	LVP Products	584.6 to 635.0(LP)	**257 200**
1541	Steel	LVP Products	584.6 to 635.0(HP)	**275 300**
1550	Steel	LVP Products	635.1 to 685.5(LP)	**284 300**
1551	Steel	LVP Products	635.1 to 685.5(HP)	**300 700**
1560	Steel	LVP Products	685.6 to 736.5(LP)	**300 400**
1561	Steel	LVP Products	685.6 to 736.5(HP)	**333 000**
1570	Steel	LVP Products	736.6 to 787.5(LP)	**337 500**
1571	Steel	LVP Products	736.6 to 787.5(HP)	**374 800**
1580	Steel	LVP Products	787.6 to 838.5(LP)	**373 100**
1581	Steel	LVP Products	787.6 to 838.5(HP)	**396 700**
1590	Steel	LVP Products	838.6 to 889.0(LP)	**390 400**
1591	Steel	LVP Products	838.6 to 889.0(HP)	**433 800**
1600	Steel	LVP Products	889.1 to 990.5(LP)	**432 700**
1601	Steel	LVP Products	889.1 to 990.5(HP)	**480 300**
1610	Steel	LVP Products	990.6 to 1143.0(LP)	**517 900**
1611	Steel	LVP Products	990.6 to 1143.0(HP)	**570 600**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
1620	Steel	LVP Products	1143.1 to 1320.5(LP)	**653 800**
1621	Steel	LVP Products	1143.1 to 1320.5(HP)	**741 300**
1630	Steel	LVP Products	1320.6 to 1523.5(LP)	**891 900**
1631	Steel	LVP Products	1320.6 to 1523.5(HP)	**1 005 100**
1640	Steel	Misc. Gases	0 to 24.0(HP)	**15 800**
1641	Steel	Misc. Gases	0 to 24.0(LP)	**14 300**
1650	Steel	Misc. Gases	24.1 to 30.1(HP)	**16 400**
1651	Steel	Misc. Gases	24.1 to 30.1(LP)	**15 000**
1660	Steel	Misc. Gases	30.2 to 37.8(HP)	**17 100**
1661	Steel	Misc. Gases	30.2 to 37.8(LP)	**15 700**
1670	Steel	Misc. Gases	37.9 to 45.3(HP)	**19 100**
1671	Steel	Misc. Gases	37.9 to 45.3(LP)	**17 400**
1680	Steel	Misc. Gases	45.4 to 54.3(HP)	**19 100**
1681	Steel	Misc. Gases	45.4 to 54.3(LP)	**17 400**
1690	Steel	Misc. Gases	54.4 to 74.6(HP)	**26 200**
1691	Steel	Misc. Gases	54.4 to 74.6(LP)	**25 300**
1700	Steel	Misc. Gases	74.7 to 101.6(HP)	**32 100**
1701	Steel	Misc. Gases	74.7 to 101.6(LP)	**31 100**
1710	Steel	Misc. Gases	101.7 to 141.3(HP)	**40 900**
1711	Steel	Misc. Gases	101.7 to 141.3(LP)	**39 800**
1720	Steel	Misc. Gases	141.4 to 193.7(HP)	**58 100**
1721	Steel	Misc. Gases	141.4 to 193.7(LP)	**50 800**
1730	Steel	Misc. Gases	193.8 to 246.1(HP)	**78 800**
1731	Steel	Misc. Gases	193.8 to 246.1(LP)	**64 500**
1740	Steel	Misc. Gases	246.2 to 298.5(HP)	**92 800**
1741	Steel	Misc. Gases	246.2 to 298.5(LP)	**75 900**
1750	Steel	Misc. Gases	298.6 to 339.8(HP)	**105 600**
1751	Steel	Misc. Gases	298.6 to 339.8(LP)	**87 800**
1760	Steel	Misc. Gases	339.9 to 381.0(HP)	**126 100**
1761	Steel	Misc. Gases	339.9 to 381.0(LP)	**107 900**
1770	Steel	Misc. Gases	381.1 to 431.7(HP)	**149 000**
1771	Steel	Misc. Gases	381.1 to 431.7(LP)	**130 400**
1780	Steel	Misc. Gases	431.8 to 482.5(HP)	**182 200**
1781	Steel	Misc. Gases	431.8 to 482.5(LP)	**164 400**
1790	Steel	Misc. Gases	482.6 to 533.5(HP)	**199 600**
1791	Steel	Misc. Gases	482.6 to 533.5(LP)	**188 700**
1800	Steel	Misc. Gases	533.6 to 584.5(HP)	**231 600**
1801	Steel	Misc. Gases	533.6 to 584.5(LP)	**204 600**
1810	Steel	Misc. Gases	584.6 to 635.0(HP)	**275 300**
1811	Steel	Misc. Gases	584.6 to 635.0(LP)	**257 200**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type Material	Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
1820	Steel	Misc. Gases	635.1 to 685.5(HP)	**300 700**
1821	Steel	Misc. Gases	635.1 to 685.5(LP)	**284 300**
1830	Steel	Misc. Gases	685.6 to 736.5(HP)	**333 000**
1831	Steel	Misc. Gases	685.6 to 736.5(LP)	**300 400**
1840	Steel	Misc. Gases	736.6 to 787.5(HP)	**374 800**
1841	Steel	Misc. Gases	736.6 to 787.5(LP)	**337 500**
1850	Steel	Misc. Gases	787.6 to 838.5(HP)	**396 700**
1851	Steel	Misc. Gases	787.6 to 838.5(LP)	**373 100**
1860	Steel	Misc. Gases	838.6 to 889.0(HP)	**433 800**
1861	Steel	Misc. Gases	838.6 to 889.0(LP)	**390 400**
1870	Steel	Misc. Gases	889.1 to 990.5(HP)	**480 300**
1871	Steel	Misc. Gases	889.1 to 990.5(LP)	**432 700**
1880	Steel	Misc. Gases	990.6 to 1143.0(HP)	**570 600**
1881	Steel	Misc. Gases	990.6 to 1143.0(LP)	**517 900**
1890	Steel	Misc. Gases	1143.1 to 1320.5(HP)	**741 300**
1891	Steel	Misc. Gases	1143.1 to 1320.5(LP)	**653 800**
1900	Steel	Misc. Gases	1320.6 to 1523.5(HP)	**1 005 100**
1901	Steel	Misc. Gases	1320.6 to 1523.5(LP)	**891 900**
1910	Steel	Misc. Liquids	0 to 24.0(LP)	**14 300**
1911	Steel	Misc. Liquids	0 to 24.0(HP)	**15 800**
1920	Steel	Misc. Liquids	24.1 to 30.1(LP)	**15 000**
1921	Steel	Misc. Liquids	24.1 to 30.1(HP)	**16 400**
1930	Steel	Misc. Liquids	30.2 to 37.8(LP)	**15 700**
1931	Steel	Misc. Liquids	30.2 to 37.8(HP)	**17 100**
1940	Steel	Misc. Liquids	37.9 to 45.3(LP)	**17 400**
1941	Steel	Misc. Liquids	37.9 to 45.3(HP)	**19 100**
1950	Steel	Misc. Liquids	45.4 to 54.3(LP)	**17 400**
1951	Steel	Misc. Liquids	45.4 to 54.3(HP)	**19 100**
1960	Steel	Misc. Liquids	54.4 to 74.6(LP)	**25 300**
1961	Steel	Misc. Liquids	54.4 to 74.6(HP)	**26 200**
1970	Steel	Misc. Liquids	74.7 to 101.6(LP)	**31 100**
1971	Steel	Misc. Liquids	74.7 to 101.6(HP)	**32 100**
1980	Steel	Misc. Liquids	101.7 to 141.3(LP)	**39 800**
1981	Steel	Misc. Liquids	101.7 to 141.3(HP)	**40 900**
1990	Steel	Misc. Liquids	141.4 to 193.7(LP)	**50 800**
1991	Steel	Misc. Liquids	141.4 to 193.7(HP)	**58 100**
2000	Steel	Misc. Liquids	193.8 to 246.1(LP)	**64 500**
2001	Steel	Misc. Liquids	193.8 to 246.1(HP)	**78 800**
2010	Steel	Misc. Liquids	246.2 to 298.5(LP)	**75 900**
2011	Steel	Misc. Liquids	246.2 to 298.5(HP)	**92 800**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Material	Component Type Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
2020	Steel	Misc. Liquids	298.6 to 339.8(LP)	**87 800**
2021	Steel	Misc. Liquids	298.6 to 339.8(HP)	**105 600**
2030	Steel	Misc. Liquids	339.9 to 381.0(LP)	**107 900**
2031	Steel	Misc. Liquids	339.9 to 381.0(HP)	**126 100**
2040	Steel	Misc. Liquids	381.1 to 431.7(LP)	**130 400**
2041	Steel	Misc. Liquids	381.1 to 431.7(HP)	**149 000**
2050	Steel	Misc. Liquids	431.8 to 482.5(LP)	**164 400**
[illegible]	Steel	Misc. Liquids	431.8 to 482.5(HP)	**182 200**
[illegible]	Steel	Misc. Liquids	482.6 to 533.5(LP)	**188 700**
2061	Steel	Misc. Liquids	482.6 to 533.5(HP)	**199 600**
2070	Steel	Misc. Liquids	533.6 to 584.5(LP)	**204 600**
2071	Steel	Misc. Liquids	533.6 to 584.5(HP)	**231 600**
2080	Steel	Misc. Liquids	584.6 to 635.0(LP)	**257 200**
2081	Steel	Misc. Liquids	584.6 to 635.0(HP)	**275 300**
2090	Steel	Misc. Liquids	635.1 to 685.5(LP)	**284 300**
2091	Steel	Misc. Liquids	635.1 to 685.5(HP)	**300 700**
2100	Steel	Misc. Liquids	685.6 to 736.5(LP)	**300 400**
2101	Steel	Misc. Liquids	685.6 to 736.5(HP)	**333 000**
2110	Steel	Misc. Liquids	736.6 to 787.5(LP)	**337 500**
2111	Steel	Misc. Liquids	736.6 to 787.5(HP)	**374 800**
2120	Steel	Misc. Liquids	787.6 to 838.5(LP)	**373 100**
2121	Steel	Misc. Liquids	787.6 to 838.5(HP)	**396 700**
2130	Steel	Misc. Liquids	838.6 to 889.0(LP)	**390 400**
2131	Steel	Misc. Liquids	838.6 to 889.0(HP)	**433 800**
2140	Steel	Misc. Liquids	889.1 to 990.5(LP)	**432 700**
2141	Steel	Misc. Liquids	889.1 to 990.5(HP)	**480 300**
2150	Steel	Misc. Liquids	990.6 to 1143.0(LP)	**517 900**
2151	Steel	Misc. Liquids	990.6 to 1143.0(HP)	**570 600**
2160	Steel	Misc. Liquids	1143.1 to 1320.5(LP)	**653 800**
2161	Steel	Misc. Liquids	1143.1 to 1320.5(HP)	**741 300**
2170	Steel	Misc. Liquids	1320.6 to 1523.5(LP)	**891 900**
2171	Steel	Misc. Liquids	1320.6 to 1523.5(HP)	**1 005 100**
2180	Steel	Natural Gas	0 to 24.0(HP)	**15 800**
2181	Steel	Natural Gas	0 to 24.0(LP)	**14 300**
2190	Steel	Natural Gas	24.1 to 30.1(HP)	**16 400**
2191	Steel	Natural Gas	24.1 to 30.1(LP)	**15 000**
2200	Steel	Natural Gas	30.2 to 37.8(HP)	**17 100**
2201	Steel	Natural Gas	30.2 to 37.8(LP)	**15 700**
2210	Steel	Natural Gas	37.9 to 45.3(HP)	**19 100**
2211	Steel	Natural Gas	37.9 to 45.3(LP)	**17 400**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
2220	Steel	Natural Gas	45.4 to 54.3(HP)	**19 100**
2221	Steel	Natural Gas	45.4 to 54.3(LP)	**17 400**
2230	Steel	Natural Gas	54.4 to 74.6(HP)	**26 200**
2231	Steel	Natural Gas	54.4 to 74.6(LP)	**25 300**
2240	Steel	Natural Gas	74.7 to 101.6(HP)	**32 100**
2241	Steel	Natural Gas	74.7 to 101.6(LP)	**31 100**
2250	Steel	Natural Gas	101.7 to 141.3(HP)	**40 900**
2251	Steel	Natural Gas	101.7 to 141.3(LP)	**39 800**
2260	Steel	Natural Gas	141.4 to 193.7(HP)	**58 100**
2261	Steel	Natural Gas	141.4 to 193.7(LP)	**50 800**
2270	Steel	Natural Gas	193.8 to 246.1(HP)	**78 800**
2271	Steel	Natural Gas	193.8 to 246.1(LP)	**64 500**
2280	Steel	Natural Gas	246.2 to 298.5(HP)	**92 800**
2281	Steel	Natural Gas	246.2 to 298.5(LP)	**75 900**
2290	Steel	Natural Gas	298.6 to 339.8(HP)	**105 600**
2291	Steel	Natural Gas	298.6 to 339.8(LP)	**87 800**
2300	Steel	Natural Gas	339.9 to 381.0(HP)	**126 100**
2301	Steel	Natural Gas	339.9 to 381.0(LP)	**107 900**
2310	Steel	Natural Gas	381.1 to 431.7(HP)	**149 000**
2311	Steel	Natural Gas	381.1 to 431.7(LP)	**130 400**
2320	Steel	Natural Gas	431.8 to 482.5(HP)	**182 200**
2321	Steel	Natural Gas	431.8 to 482.5(LP)	**164 400**
2330	Steel	Natural Gas	482.6 to 533.5(HP)	**199 600**
2331	Steel	Natural Gas	482.6 to 533.5(LP)	**188 700**
2340	Steel	Natural Gas	533.6 to 584.5(HP)	**231 600**
2341	Steel	Natural Gas	533.6 to 584.5(LP)	**204 600**
2350	Steel	Natural Gas	584.6 to 635.0(HP)	**275 300**
2351	Steel	Natural Gas	584.6 to 635.0(LP)	**257 200**
2360	Steel	Natural Gas	635.1 to 685.5(HP)	**300 700**
2361	Steel	Natural Gas	635.1 to 685.5(LP)	**284 300**
2370	Steel	Natural Gas	685.6 to 736.5(HP)	**333 000**
2371	Steel	Natural Gas	685.6 to 736.5(LP)	**300 400**
2380	Steel	Natural Gas	736.6 to 787.5(HP)	**374 800**
2381	Steel	Natural Gas	736.6 to 787.5(LP)	**337 500**
2390	Steel	Natural Gas	787.6 to 838.5(HP)	**396 700**
2391	Steel	Natural Gas	787.6 to 838.5(LP)	**373 100**
2400	Steel	Natural Gas	838.6 to 889.0(HP)	**433 800**
2401	Steel	Natural Gas	838.6 to 889.0(LP)	**390 400**
2410	Steel	Natural Gas	889.1 to 990.5(HP)	**480 300**
2411	Steel	Natural Gas	889.1 to 990.5(LP)	**432 700**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
2420	Steel	Natural Gas	990.6 to 1143.0(HP)	**570 600**
2421	Steel	Natural Gas	990.6 to 1143.0(LP)	**517 900**
2430	Steel	Natural Gas	1143.1 to 1320.5(HP)	**741 300**
2431	Steel	Natural Gas	1143.1 to 1320.5(LP)	**653 800**
2440	Steel	Natural Gas	1320.6 to 1523.5(HP)	**1 005 100**
2441	Steel	Natural Gas	1320.6 to 1523.5(LP)	**891 900**
2450	Steel	Oil-Well Effluent	0 to 24.0(LP)	**14 300**
2451	Steel	Oil-Well Effluent	0 to 24.0(HP)	**15 800**
2460	Steel	Oil-Well Effluent	24.1 to 30.1(LP)	**15 000**
2461	Steel	Oil-Well Effluent	24.1 to 30.1(HP)	**16 400**
2470	Steel	Oil-Well Effluent	30.2 to 37.8(LP)	**15 700**
2471	Steel	Oil-Well Effluent	30.2 to 37.8(HP)	**17 100**
2480	Steel	Oil-Well Effluent	37.9 to 45.3(LP)	**17 400**
2481	Steel	Oil-Well Effluent	37.9 to 45.3(HP)	**19 100**
2490	Steel	Oil-Well Effluent	45.4 to 54.3(LP)	**17 400**
2491	Steel	Oil-Well Effluent	45.4 to 54.3(HP)	**19 100**
2500	Steel	Oil-Well Effluent	54.4 to 74.6(LP)	**25 300**
2501	Steel	Oil-Well Effluent	54.4 to 74.6(HP)	**26 200**
2510	Steel	Oil-Well Effluent	74.7 to 101.6(LP)	**31 100**
2511	Steel	Oil-Well Effluent	74.7 to 101.6(HP)	**32 100**
2520	Steel	Oil-Well Effluent	101.7 to 141.3(LP)	**39 800**
2521	Steel	Oil-Well Effluent	101.7 to 141.3(HP)	**40 900**
2530	Steel	Oil-Well Effluent	141.4 to 193.7(LP)	**50 800**
2531	Steel	Oil-Well Effluent	141.4 to 193.7(HP)	**58 100**
2540	Steel	Oil-Well Effluent	193.8 to 246.1(LP)	**64 500**
2541	Steel	Oil-Well Effluent	193.8 to 246.1(HP)	**78 800**
2550	Steel	Oil-Well Effluent	246.2 to 298.5(LP)	**75 900**
2551	Steel	Oil-Well Effluent	246.2 to 298.5(HP)	**92 800**
2560	Steel	Oil-Well Effluent	298.6 to 339.8(LP)	**87 800**
2561	Steel	Oil-Well Effluent	298.6 to 339.8(HP)	**105 600**
2570	Steel	Oil-Well Effluent	339.9 to 381.0(LP)	**107 900**
2571	Steel	Oil-Well Effluent	339.9 to 381.0(HP)	**126 100**
2580	Steel	Oil-Well Effluent	381.1 to 431.7(LP)	**130 400**
2581	Steel	Oil-Well Effluent	381.1 to 431.7(HP)	**149 000**
2590	Steel	Oil-Well Effluent	431.8 to 482.5(LP)	**164 400**
2591	Steel	Oil-Well Effluent	431.8 to 482.5(HP)	**182 200**
2600	Steel	Oil-Well Effluent	482.6 to 533.5(LP)	**188 700**
2601	Steel	Oil-Well Effluent	482.6 to 533.5(HP)	**199 600**
2610	Steel	Oil-Well Effluent	533.6 to 584.5(LP)	**204 600**
2611	Steel	Oil-Well Effluent	533.6 to 584.5(HP)	**231 600**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
2620	Steel	Oil-Well Effluent	584.6 to 635.0(LP)	**257 200**
2621	Steel	Oil-Well Effluent	584.6 to 635.0(HP)	**275 300**
2630	Steel	Oil-Well Effluent	635.1 to 685.5(LP)	**284 300**
2631	Steel	Oil-Well Effluent	635.1 to 685.5(HP)	**300 700**
2640	Steel	Oil-Well Effluent	685.6 to 736.5(LP)	**300 400**
2641	Steel	Oil-Well Effluent	685.6 to 736.5(HP)	**333 000**
2650	Steel	Oil-Well Effluent	736.6 to 787.5(LP)	**337 500**
2651	Steel	Oil-Well Effluent	736.6 to 787.5(HP)	**374 800**
2660	Steel	Oil-Well Effluent	787.6 to 838.5(LP)	**373 100**
2661	Steel	Oil-Well Effluent	787.6 to 838.5(HP)	**396 700**
2670	Steel	Oil-Well Effluent	838.6 to 889.0(LP)	**390 400**
2671	Steel	Oil-Well Effluent	838.6 to 889.0(HP)	**433 800**
2680	Steel	Oil-Well Effluent	889.1 to 990.5(LP)	**432 700**
2681	Steel	Oil-Well Effluent	889.1 to 990.5(HP)	**480 300**
2690	Steel	Oil-Well Effluent	990.6 to 1143.0(LP)	**517 900**
2691	Steel	Oil-Well Effluent	990.6 to 1143.0(HP)	**570 600**
2700	Steel	Oil-Well Effluent	1143.1 to 1320.5(LP)	**653 800**
2701	Steel	Oil-Well Effluent	1143.1 to 1320.5(HP)	**741 300**
2710	Steel	Oil-Well Effluent	1320.6 to 1523.5(LP)	**891 900**
2711	Steel	Oil-Well Effluent	1320.6 to 1523.5(HP)	**1 005 100**
2720	Steel	Salt Water	0 to 24.0(LP)	**14 300**
2721	Steel	Salt Water	0 to 24.0(HP)	**15 800**
2730	Steel	Salt Water	24.1 to 30.1(LP)	**15 000**
2731	Steel	Salt Water	24.1 to 30.1(HP)	**16 400**
2740	Steel	Salt Water	30.2 to 37.8(LP)	**15 700**
2741	Steel	Salt Water	30.2 to 37.8(HP)	**17 100**
2750	Steel	Salt Water	37.9 to 45.3(LP)	**17 400**
2751	Steel	Salt Water	37.9 to 45.3(HP)	**19 100**
2760	Steel	Salt Water	45.4 to 54.3(LP)	**17 400**
2761	Steel	Salt Water	45.4 to 54.3(HP)	**19 100**
2770	Steel	Salt Water	54.4 to 74.6(LP)	**25 300**
2771	Steel	Salt Water	54.4 to 74.6(HP)	**26 200**
2780	Steel	Salt Water	74.7 to 101.6(LP)	**31 100**
2781	Steel	Salt Water	74.7 to 101.6(HP)	**32 100**
2790	Steel	Salt Water	101.7 to 141.3(LP)	**39 800**
2791	Steel	Salt Water	101.7 to 141.3(HP)	**40 900**
2800	Steel	Salt Water	141.4 to 193.7(LP)	**50 800**
2801	Steel	Salt Water	141.4 to 193.7(HP)	**58 100**
2810	Steel	Salt Water	193.8 to 246.1(LP)	**64 500**
2811	Steel	Salt Water	193.8 to 246.1(HP)	**78 800**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
2820	Steel	Salt Water	246.2 to 298.5(LP)	**75 900**
2821	Steel	Salt Water	246.2 to 298.5(HP)	**92 800**
2830	Steel	Salt Water	298.6 to 339.8(LP)	**87 800**
2831	Steel	Salt Water	298.6 to 339.8(HP)	**105 600**
2840	Steel	Salt Water	339.9 to 381.0(LP)	**107 900**
2841	Steel	Salt Water	339.9 to 381.0(HP)	**126 100**
2850	Steel	Salt Water	381.1 to 431.7(LP)	**130 400**
2851	Steel	Salt Water	381.1 to 431.7(HP)	**149 000**
2860	Steel	Salt Water	431.8 to 482.5(LP)	**164 400**
2861	Steel	Salt Water	431.8 to 482.5(HP)	**182 200**
2870	Steel	Salt Water	482.6 to 533.5(LP)	**188 700**
2871	Steel	Salt Water	482.6 to 533.5(HP)	**199 600**
2880	Steel	Salt Water	533.6 to 584.5(LP)	**204 600**
2881	Steel	Salt Water	533.6 to 584.5(HP)	**231 600**
2890	Steel	Salt Water	584.6 to 635.0(LP)	**257 200**
2891	Steel	Salt Water	584.6 to 635.0(HP)	**275 300**
2900	Steel	Salt Water	635.1 to 685.5(LP)	**284 300**
2901	Steel	Salt Water	635.1 to 685.5(HP)	**300 700**
2910	Steel	Salt Water	685.6 to 736.5(LP)	**300 400**
2911	Steel	Salt Water	685.6 to 736.5(HP)	**333 000**
2920	Steel	Salt Water	736.6 to 787.5(LP)	**337 500**
2921	Steel	Salt Water	736.6 to 787.5(HP)	**374 800**
2930	Steel	Salt Water	787.6 to 838.5(LP)	**373 100**
2931	Steel	Salt Water	787.6 to 838.5(HP)	**396 700**
2940	Steel	Salt Water	838.6 to 889.0(LP)	**390 400**
2941	Steel	Salt Water	838.6 to 889.0(HP)	**433 800**
2950	Steel	Salt Water	889.1 to 990.5(LP)	**432 700**
2951	Steel	Salt Water	889.1 to 990.5(HP)	**480 300**
2960	Steel	Salt Water	990.6 to 1143.0(LP)	**517 900**
2961	Steel	Salt Water	990.6 to 1143.0(HP)	**570 600**
2970	Steel	Salt Water	1143.1 to 1320.5(LP)	**653 800**
2971	Steel	Salt Water	1143.1 to 1320.5(HP)	**741 300**
2980	Steel	Salt Water	1320.6 to 1523.5(LP)	**891 900**
2981	Steel	Salt Water	1320.6 to 1523.5(HP)	**1 005 100**
3000	Polyethylene	Fuel Gas	0 to 24.0	**7 700**
3010	Polyethylene	Fuel Gas	24.1 to 30.1	**8 200**
3020	Polyethylene	Fuel Gas	30.2 to 37.8	**8 600**
3030	Polyethylene	Fuel Gas	37.9 to 45.3	**9 300**
3040	Polyethylene	Fuel Gas	45.4 to 54.3	**9 300**
3050	Polyethylene	Fuel Gas	54.4 to 74.6	**10 200**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type Material	Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
3060	Polyethylene	Fuel Gas	74.7 to 101.6	**13 200**
3070	Polyethylene	Fuel Gas	101.7 to 141.3	**18 500**
3080	Polyethylene	Fuel Gas	141.4 to 193.7	**26 000**
3090	Polyethylene	Fuel Gas	193.8 to 246.1	**46 600**
3100	Polyethylene	Fuel Gas	246.2 to 298.5	**61 900**
3110	Polyethylene	Fuel Gas	298.6 to 339.8	**77 000**
3111	Polyethylene	Fuel Gas	339.9 to 363.1	**81 870**
3112	Polyethylene	Fuel Gas	363.2 to 434.6	**93 850**
3113	Polyethylene	Fuel Gas	434.7 to 558.8	**299 460**
3114	Polyethylene	Fuel Gas	558.9 to 765.0	**520 450**
3115	Polyethylene	Fuel Gas	765.1 to 933.4	**632 740**
3116	Polyethylene	Fuel Gas	933.5 to 1200.5	**751 510**
3120	Polyethylene	Fresh Water	0 to 24.0	**7 700**
3130	Polyethylene	Fresh Water	24.1 to 30.1	**8 200**
3140	Polyethylene	Fresh Water	30.2 to 37.8	**8 600**
3150	Polyethylene	Fresh Water	37.9 to 45.3	**9 300**
3160	Polyethylene	Fresh Water	45.4 to 54.3	**9 300**
3170	Polyethylene	Fresh Water	54.4 to 74.6	**10 200**
3180	Polyethylene	Fresh Water	74.7 to 101.6	**13 200**
3190	Polyethylene	Fresh Water	101.7 to 141.3	**18 500**
3200	Polyethylene	Fresh Water	141.4 to 193.7	**26 000**
3210	Polyethylene	Fresh Water	193.8 to 246.1	**46 600**
3220	Polyethylene	Fresh Water	246.2 to 298.5	**61 900**
3230	Polyethylene	Fresh Water	298.6 to 339.8	**77 000**
3231	Polyethylene	Fresh Water	339.9 to 363.1	**81 870**
3232	Polyethylene	Fresh Water	363.2 to 434.6	**93 850**
3233	Polyethylene	Fresh Water	434.7 to 558.8	**299 460**
3234	Polyethylene	Fresh Water	558.9 to 765.0	**520 450**
3235	Polyethylene	Fresh Water	765.1 to 933.4	**632 740**
3236	Polyethylene	Fresh Water	933.5 to 1200.5	**751 510**
3240	Polyethylene	HVP Products	0 to 24.0	**7 700**
3250	Polyethylene	HVP Products	24.1 to 30.1	**8 200**
3260	Polyethylene	HVP Products	30.2 to 37.8	**8 600**
3270	Polyethylene	HVP Products	37.9 to 45.3	**9 300**
3280	Polyethylene	HVP Products	45.4 to 54.3	**9 300**
3290	Polyethylene	HVP Products	54.4 to 74.6	**10 200**
3300	Polyethylene	HVP Products	74.7 to 101.6	**13 200**
3310	Polyethylene	HVP Products	101.7 to 141.3	**18 500**
3320	Polyethylene	HVP Products	141.4 to 193.7	**26 000**
3330	Polyethylene	HVP Products	193.8 to 246.1	**46 600**
3340	Polyethylene	HVP Products	246.2 to 298.5	**61 900**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
3350	Polyethylene	HVP Products	298.6 to 339.8	**77 000**
3351	Polyethylene	HVP Products	339.9 to 363.1	**81 870**
3352	Polyethylene	HVP Products	363.2 to 434.6	**93 850**
3353	Polyethylene	HVP Products	434.7 to 558.8	**299 460**
3354	Polyethylene	HVP Products	558.9 to 765.0	**520 450**
3355	Polyethylene	HVP Products	765.1 to 933.4	**632 740**
3356	Polyethylene	HVP Products	933.5 to 1200.5	**751 510**
3360	Polyethylene	LVP Products	0 to 24.0	**7 700**
3370	Polyethylene	LVP Products	24.1 to 30.1	**8 200**
3380	Polyethylene	LVP Products	30.2 to 37.8	**8 600**
3390	Polyethylene	LVP Products	37.9 to 45.3	**9 300**
3400	Polyethylene	LVP Products	45.4 to 54.3	**9 300**
3410	Polyethylene	LVP Products	54.4 to 74.6	**10 200**
3420	Polyethylene	LVP Products	74.7 to 101.6	**13 200**
3430	Polyethylene	LVP Products	101.7 to 141.3	**18 500**
3440	Polyethylene	LVP Products	141.4 to 193.7	**26 000**
3450	Polyethylene	LVP Products	193.8 to 246.1	**46 600**
3460	Polyethylene	LVP Products	246.2 to 298.5	**61 900**
3470	Polyethylene	LVP Products	298.6 to 339.8	**77 000**
3471	Polyethylene	LVP Products	339.9 to 363.1	**81 870**
3472	Polyethylene	LVP Products	363.2 to 434.6	**93 850**
3473	Polyethylene	LVP Products	434.7 to 558.8	**299 460**
3474	Polyethylene	LVP Products	558.9 to 765.0	**520 450**
3475	Polyethylene	LVP Products	765.1 to 933.4	**632 740**
3476	Polyethylene	LVP Products	933.5 to 1200.5	**751 510**
3480	Polyethylene	Misc. Gases	0 to 24.0	**7 700**
3490	Polyethylene	Misc. Gases	24.1 to 30.1	**8 200**
3500	Polyethylene	Misc. Gases	30.2 to 37.8	**8 600**
3510	Polyethylene	Misc. Gases	37.9 to 45.3	**9 300**
3520	Polyethylene	Misc. Gases	45.4 to 54.3	**9 300**
3530	Polyethylene	Misc. Gases	54.4 to 74.6	**10 200**
3540	Polyethylene	Misc. Gases	74.7 to 101.6	**13 200**
3550	Polyethylene	Misc. Gases	101.7 to 141.3	**18 500**
3560	Polyethylene	Misc. Gases	141.4 to 193.7	**26 000**
3570	Polyethylene	Misc. Gases	193.8 to 246.1	**46 600**
3580	Polyethylene	Misc. Gases	246.2 to 298.5	**61 900**
3590	Polyethylene	Misc. Gases	298.6 to 339.8	**77 000**
3591	Polyethylene	Misc. Gases	339.9 to 363.1	**81 870**
3592	Polyethylene	Misc. Gases	363.2 to 434.6	**93 850**
3593	Polyethylene	Misc. Gases	434.7 to 558.8	**299 460**
3594	Polyethylene	Misc. Gases	558.9 to 765.0	**520 450**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type		Size Range mm (pressure)	Rate Per Kilometre ($)
	Material	Substance		
3595	Polyethylene	Misc. Gases	765.1 to 933.4	**632 740**
3596	Polyethylene	Misc. Gases	933.5 to 1200.5	**751 510**
3600	Polyethylene	Natural Gas	0 to 24.0	**7 700**
3610	Polyethylene	Natural Gas	24.1 to 30.1	**8 200**
3620	Polyethylene	Natural Gas	30.2 to 37.8	**8 600**
3630	Polyethylene	Natural Gas	37.9 to 45.3	**9 300**
3640	Polyethylene	Natural Gas	45.4 to 54.3	**9 300**
3650	Polyethylene	Natural Gas	54.4 to 74.6	**10 200**
3660	Polyethylene	Natural Gas	74.7 to 101.6	**13 200**
3670	Polyethylene	Natural Gas	101.7 to 141.3	**18 500**
3680	Polyethylene	Natural Gas	141.4 to 193.7	**26 000**
3690	Polyethylene	Natural Gas	193.8 to 246.1	**46 600**
3700	Polyethylene	Natural Gas	246.2 to 298.5	**61 900**
3710	Polyethylene	Natural Gas	298.6 to 339.8	**77 000**
3711	Polyethylene	Natural Gas	339.9 to 363.1	**81 870**
3712	Polyethylene	Natural Gas	363.2 to 434.6	**93 850**
3713	Polyethylene	Natural Gas	434.7 to 558.8	**299 460**
3714	Polyethylene	Natural Gas	558.9 to 765.0	**520 450**
3715	Polyethylene	Natural Gas	765.1 to 933.4	**632 740**
3716	Polyethylene	Natural Gas	933.5 to 1200.5	**751 510**
3720	Polyethylene	Oil-Well Effluent	0 to 24.0	**7 700**
3730	Polyethylene	Oil-Well Effluent	24.1 to 30.1	**8 200**
3740	Polyethylene	Oil-Well Effluent	30.2 to 37.8	**8 600**
3750	Polyethylene	Oil-Well Effluent	37.9 to 45.3	**9 300**
3760	Polyethylene	Oil-Well Effluent	45.4 to 54.3	**9 300**
3770	Polyethylene	Oil-Well Effluent	54.4 to 74.6	**10 200**
3780	Polyethylene	Oil-Well Effluent	74.7 to 101.6	**13 200**
3790	Polyethylene	Oil-Well Effluent	101.7 to 141.3	**18 500**
3800	Polyethylene	Oil-Well Effluent	141.4 to 193.7	**26 000**
3810	Polyethylene	Oil-Well Effluent	193.8 to 246.1	**46 600**
3820	Polyethylene	Oil-Well Effluent	246.2 to 298.5	**61 900**
3830	Polyethylene	Oil-Well Effluent	298.6 to 339.8	**77 000**
3831	Polyethylene	Oil-Well Effluent	339.9 to 363.1	**81 870**
3832	Polyethylene	Oil-Well Effluent	363.2 to 434.6	**93 850**
3833	Polyethylene	Oil-Well Effluent	434.7 to 558.8	**299 460**
3834	Polyethylene	Oil-Well Effluent	558.9 to 765.0	**520 450**
3835	Polyethylene	Oil-Well Effluent	765.1 to 933.4	**632 740**
3836	Polyethylene	Oil-Well Effluent	933.5 to 1200.5	**751 510**
3840	Polyethylene	Salt Water	0 to 24.0	**7 700**
3850	Polyethylene	Salt Water	24.1 to 30.1	**8 200**
3860	Polyethylene	Salt Water	30.2 to 37.8	**8 600**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Material	Component Type Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
3870	Polyethylene	Salt Water	37.9 to 45.3	**9 300**
3880	Polyethylene	Salt Water	45.4 to 54.3	**9 300**
3890	Polyethylene	Salt Water	54.4 to 74.6	**10 200**
3900	Polyethylene	Salt Water	74.7 to 101.6	**13 200**
3910	Polyethylene	Salt Water	101.7 to 141.3	**18 500**
3920	Polyethylene	Salt Water	141.4 to 193.7	**26 000**
3930	Polyethylene	Salt Water	193.8 to 246.1	**46 600**
3940	Polyethylene	Salt Water	246.2 to 298.5	**61 900**
3950	Polyethylene	Salt Water	298.6 to 339.8	**77 000**
3951	Polyethylene	Salt Water	339.9 to 363.1	**81 870**
3952	Polyethylene	Salt Water	363.2 to 434.6	**93 850**
3953	Polyethylene	Salt Water	434.7 to 558.8	**299 460**
3954	Polyethylene	Salt Water	558.9 to 765.0	**520 450**
3955	Polyethylene	Salt Water	765.1 to 933.4	**632 740**
3956	Polyethylene	Salt Water	933.5 to 1200.5	**751 510**
3960	Polyvinyl	Fuel Gas	0 to 24.0	**7 700**
3970	Polyvinyl	Fuel Gas	24.1 to 30.1	**8 200**
3980	Polyvinyl	Fuel Gas	30.2 to 37.8	**8 600**
3990	Polyvinyl	Fuel Gas	37.9 to 45.3	**9 300**
4000	Polyvinyl	Fuel Gas	45.4 to 54.3	**[illegible] 300**
4010	Polyvinyl	Fuel Gas	54.4 to 74.6	**10 200**
4020	Polyvinyl	Fuel Gas	74.7 to 101.6	**13 200**
4030	Polyvinyl	Fuel Gas	101.7 to 141.3	**18 500**
4040	Polyvinyl	Fuel Gas	141.4 to 193.7	**26 000**
4050	Polyvinyl	Fuel Gas	193.8 to 246.1	**46 600**
4060	Polyvinyl	Fuel Gas	246.2 to 298.5	**61 900**
4070	Polyvinyl	Fuel Gas	298.6 to 339.8	**77 000**
4071	Polyvinyl	Fuel Gas	339.9 to 363.1	**81 870**
4072	Polyvinyl	Fuel Gas	363.2 to 434.6	**93 850**
4073	Polyvinyl	Fuel Gas	434.7 to 558.8	**299 460**
4074	Polyvinyl	Fuel Gas	558.9 to 765.0	**520 450**
4075	Polyvinyl	Fuel Gas	765.1 to 933.4	**632 740**
4076	Polyvinyl	Fuel Gas	933.5 to 1200.5	**751 510**
4080	Polyvinyl	Fresh Water	0 to 24.0	**7 700**
4090	Polyvinyl	Fresh Water	24.1 to 30.1	**8 200**
4100	Polyvinyl	Fresh Water	30.2 to 37.8	**8 600**
4110	Polyvinyl	Fresh Water	37.9 to 45.3	**9 300**
4120	Polyvinyl	Fresh Water	45.4 to 54.3	**9 300**
4130	Polyvinyl	Fresh Water	54.4 to 74.6	**10 200**
4140	Polyvinyl	Fresh Water	74.7 to 101.6	**13 200**
4150	Polyvinyl	Fresh Water	101.7 to 141.3	**18 500**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
4160	Polyvinyl	Fresh Water	141.4 to 193.7	**26 000**
4170	Polyvinyl	Fresh Water	193.8 to 246.1	**46 600**
4180	Polyvinyl	Fresh Water	246.2 to 298.5	**61 900**
4190	Polyvinyl	Fresh Water	298.6 to 339.8	**77 000**
4191	Polyvinyl	Fresh Water	339.9 to 363.1	**81 870**
4192	Polyvinyl	Fresh Water	363.2 to 434.6	**93 850**
4193	Polyvinyl	Fresh Water	434.7 to 558.8	**299 460**
4194	Polyvinyl	Fresh Water	558.9 to 765.0	**520 450**
4195	Polyvinyl	Fresh Water	765.1 to 933.4	**632 740**
4196	Polyvinyl	Fresh Water	933.5 to 1200.5	**751 510**
4200	Polyvinyl	Natural Gas	0 to 24.0	**7 700**
4210	Polyvinyl	Natural Gas	24.1 to 30.1	**8 200**
4220	Polyvinyl	Natural Gas	30.2 to 37.8	**8 600**
4230	Polyvinyl	Natural Gas	37.9 to 45.3	**9 300**
4240	Polyvinyl	Natural Gas	45.4 to 54.3	**9 300**
4250	Polyvinyl	Natural Gas	54.4 to 74.6	**10 200**
4260	Polyvinyl	Natural Gas	74.7 to 101.6	**13 200**
4270	Polyvinyl	Natural Gas	101.7 to 141.3	**18 500**
4280	Polyvinyl	Natural Gas	141.4 to 193.7	**26 000**
4290	Polyvinyl	Natural Gas	193.8 to 246.1	**46 600**
4300	Polyvinyl	Natural Gas	246.2 to 298.5	**61 900**
4310	Polyvinyl	Natural Gas	298.6 to 339.8	**77 000**
4311	Polyvinyl	Natural Gas	339.9 to 363.1	**81 870**
4312	Polyvinyl	Natural Gas	363.2 to 434.6	**93 850**
4313	Polyvinyl	Natural Gas	434.7 to 558.8	**299 460**
4314	Polyvinyl	Natural Gas	558.9 to 765.0	**520 450**
4315	Polyvinyl	Natural Gas	765.1 to 933.4	**632 740**
4316	Polyvinyl	Natural Gas	933.5 to 1200.5	**751 510**
4320	Polyvinyl	Oil-Well Effluent	0 to 24.0	**7 700**
4330	Polyvinyl	Oil-Well Effluent	24.1 to 30.1	**8 200**
4340	Polyvinyl	Oil-Well Effluent	30.2 to 37.8	**8 600**
4350	Polyvinyl	Oil-Well Effluent	37.9 to 45.3	**9 300**
4360	Polyvinyl	Oil-Well Effluent	45.4 to 54.3	**9 300**
4370	Polyvinyl	Oil-Well Effluent	54.4 to 74.6	**10 200**
4380	Polyvinyl	Oil-Well Effluent	74.7 to 101.6	**13 200**
4390	Polyvinyl	Oil-Well Effluent	101.7 to 141.3	**18 500**
4400	Polyvinyl	Oil-Well Effluent	141.4 to 193.7	**26 000**
4410	Polyvinyl	Oil-Well Effluent	193.8 to 246.1	**46 600**
4420	Polyvinyl	Oil-Well Effluent	246.2 to 298.5	**61 900**
4430	Polyvinyl	Oil-Well Effluent	298.6 to 339.8	**77 000**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type Material	Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
4431	Polyvinyl	Oil-Well Effluent	339.9 to 363.1	**81 870**
4432	Polyvinyl	Oil-Well Effluent	363.2 to 434.6	**93 850**
4433	Polyvinyl	Oil-Well Effluent	434.7 to 558.8	**299 460**
4434	Polyvinyl	Oil-Well Effluent	558.9 to 765.0	**520 450**
4435	Polyvinyl	Oil-Well Effluent	765.1 to 933.4	**632 740**
4436	Polyvinyl	Oil-Well Effluent	933.5 to 1200.5	**751 510**
4440	Polyvinyl	Sour Natural Gas	0 to 24.0	**7 700**
4450	Polyvinyl	Sour Natural Gas	24.1 to 30.1	**8 200**
4460	Polyvinyl	Sour Natural Gas	30.2 to 37.8	**8 600**
4470	Polyvinyl	Sour Natural Gas	37.9 to 45.3	**9 300**
4480	Polyvinyl	Sour Natural Gas	45.4 to 54.3	**9 300**
4490	Polyvinyl	Sour Natural Gas	54.4 to 74.6	**10 200**
4500	Polyvinyl	Sour Natural Gas	74.7 to 101.6	**13 200**
4510	Polyvinyl	Sour Natural Gas	101.7 to 141.3	**18 500**
4520	Polyvinyl	Sour Natural Gas	141.4 to 193.7	**26 000**
4530	Polyvinyl	Sour Natural Gas	193.8 to 246.1	**46 600**
4540	Polyvinyl	Sour Natural Gas	246.2 to 298.5	**61 900**
4550	Polyvinyl	Sour Natural Gas	298.6 to 339.8	**77 000**
4551	Polyvinyl	Sour Natural Gas	339.9 to 363.1	**81 870**
4552	Polyvinyl	Sour Natural Gas	363.2 to 434.6	**93 850**
4553	Polyvinyl	Sour Natural Gas	434.7 to 558.8	**299 460**
4554	Polyvinyl	Sour Natural Gas	558.9 to 765.0	**520 450**
4555	Polyvinyl	Sour Natural Gas	765.1 to 933.4	**632 740**
4556	Polyvinyl	Sour Natural Gas	933.5 to 1200.5	**751 5**[illegible]
4560	Polyvinyl	Salt Water	0 to 24.0	**7 700**
4570	Polyvinyl	Salt Water	24.1 to 30.1	**8 200**
4580	Polyvinyl	Salt Water	30.2 to 37.8	**8 600**
4590	Polyvinyl	Salt Water	37.9 to 45.3	**9 300**
4600	Polyvinyl	Salt Water	45.4 to 54.3	**9 300**
4610	Polyvinyl	Salt Water	54.4 to 74.6	**10 200**
4620	Polyvinyl	Salt Water	74.7 to 101.6	**13 200**
4630	Polyvinyl	Salt Water	101.7 to 141.3	**18 500**
4640	Polyvinyl	Salt Water	141.4 to 193.7	**26 000**
4650	Polyvinyl	Salt Water	193.8 to 246.1	**46 600**
4660	Polyvinyl	Salt Water	246.2 to 298.5	**61 900**
4670	Polyvinyl	Salt Water	298.6 to 339.8	**77 000**
4671	Polyvinyl	Salt Water	339.9 to 363.1	**81 870**
4672	Polyvinyl	Salt Water	363.2 to 434.6	**93 850**
4673	Polyvinyl	Salt Water	434.7 to 558.8	**299 460**
4674	Polyvinyl	Salt Water	558.9 to 765.0	**520 450**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			
	Material	Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
4675	Polyvinyl	Salt Water	765.1 to 933.4	**632 740**
4676	Polyvinyl	Salt Water	933.5 to 1200.5	**751 510**
5000	Aluminum	Crude Oil	37.9 to 45.3	**14 600**
5010	Aluminum	Crude Oil	45.4 to 54.3	**14 600**
5020	Aluminum	Crude Oil	54.4 to 74.6	**18 000**
5030	Aluminum	Crude Oil	74.7 to 101.6	**24 400**
5040	Aluminum	Crude Oil	101.7 to 141.3	**35 400**
5041	Aluminum	Crude Oil	141.4 to 195.3	**46 470**
5045	Aluminum	Fuel Gas	0.0 to 37.8	**14 600**
5050	Aluminum	Fuel Gas	37.9 to 45.3	**14 600**
5060	Aluminum	Fuel Gas	45.4 to 54.3	**14 600**
5070	Aluminum	Fuel Gas	54.4 to 74.6	**18 000**
5080	Aluminum	Fuel Gas	74.7 to 101.6	**24 400**
5090	Aluminum	Fuel Gas	101.7 to 141.3	**35 400**
5091	Aluminum	Fuel Gas	141.4 to 195.3	**46 470**
5100	Aluminum	Fresh Water	37.9 to 45.3	**14 600**
5110	Aluminum	Fresh Water	45.4 to 54.3	**14 600**
5120	Aluminum	Fresh Water	54.4 to 74.6	**18 000**
5130	Aluminum	Fresh Water	74.7 to 101.6	**24 400**
5140	Aluminum	Fresh Water	101.7 to 141.3	**35 400**
5141	Aluminum	Fresh Water	141.4 to 195.3	**46 470**
5145	Aluminum	HVP Products	0.0 to 37.8	**14 600**
5150	Aluminum	HVP Products	37.9 to 45.3	**14 600**
5160	Aluminum	HVP Products	45.4 to 54.3	**14 600**
5170	Aluminum	HVP Products	54.4 to 74.6	**18 000**
5180	Aluminum	HVP Products	74.7 to 101.6	**24 400**
5190	Aluminum	HVP Products	101.7 to 141.3	**35 400**
5191	Aluminum	HVP Products	141.4 to 195.3	**46 470**
5200	Aluminum	LVP Products	37.9 to 45.3	**14 600**
5210	Aluminum	LVP Products	45.4 to 54.3	**14 600**
5220	Aluminum	LVP Products	54.4 to 74.6	**18 000**
5230	Aluminum	LVP Products	74.7 to 101.6	**24 400**
5240	Aluminum	LVP Products	101.7 to 141.3	**35 400**
5241	Aluminum	LVP Products	141.4 to 195.3	**46 470**
5250	Aluminum	Misc. Gases	37.9 to 45.3	**14 600**
5260	Aluminum	Misc. Gases	45.4 to 54.3	**14 600**
5270	Aluminum	Misc. Gases	54.4 to 74.6	**18 000**
5280	Aluminum	Misc. Gases	74.7 to 101.6	**24 400**
5290	Aluminum	Misc. Gases	101.7 to 141.3	**35 400**
5291	Aluminum	Misc. Gases	141.4 to 195.3	**46 470**
5295	Aluminum	Natural Gas	0.0 to 37.8	**14 600**
5300	Aluminum	Natural Gas	37.9 to 45.3	**14 600**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
5310	Aluminum	Natural Gas	45.4 to 54.3	**14 600**
5320	Aluminum	Natural Gas	54.4 to 74.6	**18 000**
5330	Aluminum	Natural Gas	74.7 to 101.6	**24 400**
5340	Aluminum	Natural Gas	101.7 to 141.3	**35 400**
5341	Aluminum	Natural Gas	141.4 to 195.3	**46 470**
5350	Aluminum	Oil-Well Effluent	37.9 to 45.3	**14 600**
5360	Aluminum	Oil-Well Effluent	45.4 to 54.3	**14 600**
5370	Aluminum	Oil-Well Effluent	54.4 to 74.6	**18 000**
5380	Aluminum	Oil-Well Effluent	74.7 to 101.6	**24 400**
5390	Aluminum	Oil-Well Effluent	101.7 to 141.3	**35 400**
5391	Aluminum	Oil-Well Effluent	141.4 to 195.3	**46 470**
5400	Aluminum	Sour Natural Gas	37.9 to 45.3	**14 600**
5410	Aluminum	Sour Natural Gas	45.4 to 54.3	**14 600**
5420	Aluminum	Sour Natural Gas	54.4 to 74.6	**18 000**
5430	Aluminum	Sour Natural Gas	74.7 to 101.6	**24 400**
5440	Aluminum	Sour Natural Gas	101.7 to 141.3	**35 400**
5441	Aluminum	Sour Natural Gas	141.4 to 195.3	**46 470**
5450	Aluminum	Salt Water	37.9 to 45.3	**14 600**
5460	Aluminum	Salt Water	45.4 to 54.3	**14 600**
5470	Aluminum	Salt Water	54.4 to 74.6	**18 000**
5480	Aluminum	Salt Water	74.7 to 101.6	**24 400**
5490	Aluminum	Salt Water	101.7 to 141.3	**35 400**
5491	Aluminum	Salt Water	141.4 to 195.3	**46 470**
6000	Fibreglass	Crude Oil	0 to 24.0	**7 700**
6010	Fibreglass	Crude Oil	24.1 to 30.1	**8 200**
6020	Fibreglass	Crude Oil	30.2 to 37.8	**8 600**
6030	Fibreglass	Crude Oil	37.9 to 45.3	**9 300**
6040	Fibreglass	Crude Oil	45.4 to 54.3	**9 300**
6050	Fibreglass	Crude Oil	54.4 to 74.6	**10 200**
6060	Fibreglass	Crude Oil	74.7 to 101.6	**13 200**
6070	Fibreglass	Crude Oil	101.7 to 141.3	**18 500**
6080	Fibreglass	Crude Oil	141.4 to 193.7	**26 000**
6090	Fibreglass	Crude Oil	193.8 to 246.1	**46 600**
6100	Fibreglass	Crude Oil	246.2 to 298.5	**61 900**
6110	Fibreglass	Crude Oil	298.6 to 339.8	**77 000**
6111	Fibreglass	Crude Oil	559.0 to 660.0	**194 610**
6112	Fibreglass	Crude Oil	864.0 to 914.0	**374 250**
6120	Fibreglass	Fuel Gas	0 to 24.0	**7 700**
6130	Fibreglass	Fuel Gas	24.1 to 30.1	**8 200**
6140	Fibreglass	Fuel Gas	30.2 to 37.8	**8 600**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type Material	Substance	Size Range mm (pressure)	Rate Per Kilometre ($)
6150	Fibreglass	Fuel Gas	37.9 to 45.3	**9 300**
6160	Fibreglass	Fuel Gas	45.4 to 54.3	**9 300**
6170	Fibreglass	Fuel Gas	54.4 to 74.6	**10 200**
6180	Fibreglass	Fuel Gas	74.7 to 101.6	**13 200**
6190	Fibreglass	Fuel Gas	101.7 to 141.3	**18 500**
6200	Fibreglass	Fuel Gas	141.4 to 193.7	**26 000**
6210	Fibreglass	Fuel Gas	193.8 to 246.1	**46 600**
6220	Fibreglass	Fuel Gas	246.2 to 298.5	**61 900**
6230	Fibreglass	Fuel Gas	298.6 to 339.8	**77 000**
6231	Fibreglass	Fuel Gas	559.0 to 660.0	**194 610**
6232	Fibreglass	Fuel Gas	864.0 to 914.0	**374 250**
6240	Fibreglass	Fresh Water	0 to 24.0	**7 700**
6250	Fibreglass	Fresh Water	24.1 to 30.1	**8 200**
6260	Fibreglass	Fresh Water	30.2 to 37.8	**8 600**
6270	Fibreglass	Fresh Water	37.9 to 45.3	**9 300**
6280	Fibreglass	Fresh Water	45.4 to 54.3	**9 300**
6290	Fibreglass	Fresh Water	54.4 to 74.6	**10 200**
6300	Fibreglass	Fresh Water	74.7 to 101.6	**13 200**
6310	Fibreglass	Fresh Water	101.7 to 141.3	**18 500**
6320	Fibreglass	Fresh Water	141.4 to 193.7	**26 000**
6330	Fibreglass	Fresh Water	193.8 to 246.1	**46 600**
6340	Fibreglass	Fresh Water	246.2 to 298.5	**61 900**
6350	Fibreglass	Fresh Water	298.6 to 339.8	**77 000**
6351	Fibreglass	Fresh Water	559.0 to 660.0	**194 610**
6352	Fibreglass	Fresh Water	864.0 to 914.0	**374 250**
6360	Fibreglass	Natural Gas	0 to 24.0	**7 700**
6370	Fibreglass	Natural Gas	24.1 to 30.1	**8 200**
6380	Fibreglass	Natural Gas	30.2 to 37.8	**8 600**
6390	Fibreglass	Natural Gas	37.9 to 45.3	**9 300**
6400	Fibreglass	Natural Gas	45.4 to 54.3	**9 300**
6410	Fibreglass	Natural Gas	54.4 to 74.6	**10 200**
6420	Fibreglass	Natural Gas	74.7 to 101.6	**13 200**
6430	Fibreglass	Natural Gas	101.7 to 141.3	**18 500**
6440	Fibreglass	Natural Gas	141.4 to 193.7	**26 000**
6450	Fibreglass	Natural Gas	193.8 to 246.1	**46 600**
6460	Fibreglass	Natural Gas	246.2 to 298.5	**61 900**
6470	Fibreglass	Natural Gas	298.6 to 339.8	**77 000**
6471	Fibreglass	Natural Gas	559.0 to 660.0	**194 610**
6472	Fibreglass	Natural Gas	864.0 to 914.0	**374 250**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
6480	Fibreglass	Oil-Well Effluent	0 to 24.0	**7 700**
6490	Fibreglass	Oil-Well Effluent	24.1 to 30.1	**8 200**
6500	Fibreglass	Oil-Well Effluent	30.2 to 37.8	**8 600**
6510	Fibreglass	Oil-Well Effluent	37.9 to 45.3	**9 300**
6520	Fibreglass	Oil-Well Effluent	45.4 to 54.3	**9 300**
6530	Fibreglass	Oil-Well Effluent	54.4 to 74.6	**10 200**
6540	Fibreglass	Oil-Well Effluent	74.7 to 101.6	**13 200**
6550	Fibreglass	Oil-Well Effluent	101.7 to 141.3	**18 500**
6560	Fibreglass	Oil-Well Effluent	141.4 to 193.7	**26 000**
6570	Fibreglass	Oil-Well Effluent	193.8 to 246.1	**46 600**
6580	Fibreglass	Oil-Well Effluent	246.2 to 298.5	**61 900**
6590	Fibreglass	Oil-Well Effluent	298.6 to 339.8	**77 000**
6591	Fibreglass	Oil-Well Effluent	559.0 to 660.0	**194 610**
6592	Fibreglass	Oil-Well Effluent	864.0 to 914.0	**374 250**
6600	Fibreglass	Salt Water	0 to 24.0	**7 700**
6610	Fibreglass	Salt Water	24.1 to 30.1	**8 200**
6620	Fibreglass	Salt Water	30.2 to 37.8	**8 600**
6630	Fibreglass	Salt Water	37.9 to 45.3	**9 300**
6640	Fibreglass	Salt Water	45.4 to 54.3	**9 300**
6650	Fibreglass	Salt Water	54.4 to 74.6	**10 200**
6660	Fibreglass	Salt Water	74.7 to 101.6	**13 200**
6670	Fibreglass	Salt Water	101.7 to 141.3	**18 500**
6680	Fibreglass	Salt Water	141.4 to 193.7	**26 000**
6690	Fibreglass	Salt Water	193.8 to 246.1	**46 600**
6700	Fibreglass	Salt Water	246.2 to 298.5	**61 900**
6710	Fibreglass	Salt Water	298.6 to 339.8	**77 000**
6711	Fibreglass	Salt Water	559.0 to 660.0	**194 610**
6712	Fibreglass	Salt Water	864.0 to 914.0	**374 250**
9010	Plastic Lined / Cement Lined		37.9 to 45.3	**32 700**
9020	Plastic Lined / Cement Lined		45.4 to 54.3	**32 700**
9030	Plastic Lined / Cement Lined		54.4 to 74.6	**36 500**
9040	Plastic Lined / Cement Lined		74.7 to 101.6	**40 500**
9050	Plastic Lined / Cement Lined		101.7 to 141.3	**53 800**
9060	Plastic Lined / Cement Lined		141.4 to 193.7	**73 600**
9070	Plastic Lined / Cement Lined		193.8 to 246.1	**98 300**
9080	Plastic Lined / Cement Lined		246.2 to 298.5	**127 400**

1.007 PIPE (PL) (cont.)

Formula: Base Cost = n X rate per kilometre in each component type

Where n = length in kilometre(s) in each component type

Code	Component Type			Rate Per Kilometre ($)
	Material	Substance	Size Range mm (pressure)	
9090	Plastic Lined / Cement Lined		298.6 to 339.8	**144 400**
9100	Plastic Lined / Cement Lined		339.9 to 381.0	**177 500**
9110	Plastic Lined / Cement Lined		381.1 to 431.7	**230 000**
9120	Plastic Lined / Cement Lined		431.8 to 482.5	**264 300**
9130	Stainless Steel		141.4 to 193.7	**109 400**
9140	Hot Water Return		141.4 to 193.7	**123 500**
9150	Heated Sulphur		298.6 to 339.8	**391 700**
9160	Steam Injection		193.8 to 246.1	**563 500**
9170	Steam Injection		339.9 to 381.0	**770 100**
9180	Steam Injection		381.1 to 431.7	**883 900**
9190	Steam Injection		431.8 to 482.5	**981 500**
9200	Steam Injection		482.6 to 533.5	**1 069 700**

1.007.100 GAS DISTRIBUTION SYSTEM (GDS)

Formula: Base Cost = n X rate per customer hookup in each component type

Where n = number of customer hookups in each component type

Code	Component Type	Rate Per Customer Hookup ($)
10	8.5 cubic metres per hour or less. Service line from tap to meter.	**176.00**
20	8.5 cubic metres per hour or greater. Service line from tap to meter	**182.00**
30	8.5 cubic metres per hour or less. Meter set including meter with regulator	**181.00**
40	8.5 cubic metres per hour or greater. Meter set including meter with regulator	**1 413.00**

Note: For distribution and transmission pipe use Section 1.005 Definitions.

1.007.200 SINGLE-ZONE AND MULTI-ZONE WELLS (WL)

Formula: Base Cost = Constant + (n - 304m) X rate per metres of depth in each component type

Where n = depth in metres of the deepest producible zone in each component type.

Code	Component Type	Constant ($)	Rate Per Metre ($)
10	Single-Zone–Crude Oil Flow	**39 990**	**74.80**
20	Single-Zone – Crude Oil Pump	**59 620**	**87.30**
30	Single-Zone – Gas	**30 900**	**81.90**
40	Single-Zone – Injection/Disposal/Storage	**38 320**	**91.90**
50	Single-Zone – Crude Bitumen	**77 100**	**127.10**
80	Multi-Zone – Crude Oil Flow	**50 100**	**82.00**
90	Multi-Zone – Crude Oil Pump	**71 220**	**121.20**
100	Multi-Zone – Gas	**43 980**	**83.20**
110	Multi-Zone – Injection/Disposal/Storage	**57 930**	**128.60**
120	Drilled and Cased	**1 360**	**81.90**

Note: If “n” is less than 304 metres, then n equals 304 metres.

Single-Zone and Multi-Zone Wells (WL)

Formula: Base Cost = Constant + (n X rate per metres of depth) in each component type.

Where n = depth in metres of the deepest producible zone in each component type.

Code	Component Type	Constant ($)	Rate Per Metre ($)
60	Single-Zone–Tubingless	**9 180**	**54.10**
70*	Water Source/Supply*	**12 000**	**0**
230	Single-Zone–Pool Code 0158	**2 380**	**59.50**
240	Multi-Zone–Pool Code 0158	**2 380**	**59.50**
250	Pool Code 0158 Drilled and Cased	**680**	**59.50**

Note: Water Source/Supply only to be used for wells where water is the only fluid produced in the well bore.*

2.000 SCHEDULE B–ASSESSMENT YEAR MODIFIERS

2.001 ELECTRIC POWER SYSTEMS (EM)

Code	Property Type	Year	Assessment Year Modifier
EM 02	Electric Power Systems	2002	**1.04**

2.002 TELECOMMUNICATION SYSTEMS (TM, CM)

Code	Property Type	Year	Assessment Year Modifier
TM 02	Telecommunication Systems*	2002	**0.99**
CM 02	Cable Television Systems	2002	**1.03**

Note: Does not include Cable Television Systems.*

2.003 PIPELINE (PL)

Code	Property Type	Year	Assessment Year Modifier
PL 02	Pipeline	2002	**1.18**

3.000 SCHEDULE C–DEPRECIATION

The depreciation factors prescribed in Schedule C for linear property that is described in Schedule C are exhaustive.

No additional depreciation can be applied except as specified in Schedule D.

Age means the chronological age or the effective age, in years.

Deemed age is determined by the assessor in accordance with generally accepted assessment principles.

3.001 ELECTRIC POWER SYSTEMS DEPRECIATION

The depreciation factor for electric power systems is 0.75, unless otherwise specified in this section.

Note: Procedure for using Depreciation Tables 3.001.300, 3.001.400 and 3.001.500.

Determine the size of the generation unit.

Determine the "Generation Unit Depreciation Life" (columns). The generation unit depreciation type is equal to the assessment year **minus** the year the unit is deemed by the assessor to have been constructed.

Determine the "Age of Component" (rows). The age of the component is equal to the Assessment Year **minus** the year the component is deemed by the assessor to have been constructed.

Size of generation unit, generation unit depreciation life and age of component are required to determine the correct depreciation factor for each size of generation unit.

EXAMPLE
If there was a twenty-year-old, fifty-five megawatt generation unit, (column type 20) with a ten-year-old component (row 10) then that component would have a depreciation factor of 0.563 (column 20, row 10 page 54)

3.001.100 SUBSTATION DEPRECIATION FACTORS

Age of Component	All Substations
0	1.000
1	0.960
2	0.920
3	0.870
4	0.840
5	0.800
6	0.760
7	0.720
8	0.690
9	0.660
10	0.620
11	0.590
12	0.570
13	0.540
14	0.510
15	0.490
16	0.460
17	0.440
18	0.420
19	0.400
20	0.380
21	0.360
22	0.340
23	0.320
24	0.310
25	0.290
26	0.280
27	0.260
28	0.250
29	0.240
30	0.220
31	0.210
32	0.200
33	0.190
34	0.180
35	0.170
36	0.160
37	0.150
38	0.140
39	0.130
40	0.120
41	0.120

3.001.200 GENERATION FACILITIES–DEPRECIATION FACTORS–ALL WIND GENERATION

Age of Component	All Units
0	0.750
1	0.750
2	0.750
3	0.750
4	0.750
5	0.750
6	0.750
7	0.717
8	0.676
9	0.636
10	0.598
11	0.560
12	0.524
13	0.489
14	0.455
15	0.421
16	0.389
17	0.360
18	0.330
19	0.303
20	0.277
21	0.252
22	0.228
23	0.206
24	0.200
25	0.200

3.001.210 GENERATION FACILITIES–DEPRECIATION FACTORS–ATCO

Age of Component	Battle River #3 & #4	HR Milner	Battle River # 5	Jasper Astoria	Sheerness #1	Sheerness #2
0	0.750	0.750	0.750	0.637	0.750	0.750
1	0.750	0.750	0.750	0.200	0.750	0.750
2	0.718	0.750	0.750	0.200	0.750	0.750
3	0.643	0.686	0.750		0.750	0.750
4	0.581	0.624	0.750		0.750	0.750
5	0.529	0.570	0.750		0.750	0.750
6	0.484	0.522	0.728		0.750	0.750
7	0.445	0.480	0.697		0.750	0.750
8	0.412	0.442	0.669		0.728	0.730
9	0.383	0.408	0.643		0.705	0.706
10	0.356	0.378	0.617		0.683	0.685
11	0.333	0.350	0.594		0.662	0.665
12	0.313	0.323	0.573		0.643	0.646
13	0.294	0.301	0.552		0.625	0.627
14	0.275	0.279	0.533		0.607	0.610
15	0.260	0.259	0.515		0.591	0.594
16	0.246	0.240	0.498		0.575	0.578
17	0.232	0.223	0.480		0.560	0.563
18	0.220	0.208	0.466		0.547	0.549
19	0.209	0.200	0.449		0.532	0.535
20	0.200	0.200	0.436		0.519	0.521
21	0.200	0.200	0.422		0.506	0.509
22	0.200		0.409		0.495	0.497
23	0.200		0.398		0.484	0.487
24			0.385		0.473	0.475
25			0.374		0.462	0.464
26			0.363		0.451	0.454
27			0.353		0.442	0.445
28			0.342		0.433	0.436
29			0.331		0.423	0.425
30			0.321		0.416	0.415
31			0.312		0.406	0.409
32			0.304		0.397	0.400
33			0.297		0.389	0.392
34			0.286		0.382	0.384
35			0.281		0.375	0.377
36			0.272		0.368	0.367
37			0.264		0.359	0.361
38			0.256		0.354	0.356
39			0.249		0.345	0.347
40			0.243		0.341	0.339

3.001.210 Generation Facilities–Depreciation Factors–ATCO (cont.)

Age of Component	Battle River #3 & #4	HR Milner	Battle River # 5	Jasper Astoria	Sheerness #1	Sheerness #2
41			0.237		0.333	0.335
42			0.232		0.326	0.328
43			0.224		0.323	0.321
44			0.220		0.317	0.315
45			0.212		0.311	0.308
46			0.209		0.306	0.303
47			0.202		0.300	0.297
48			0.200		0.296	0.293
49			0.200		0.286	0.288
50			0.200		0.282	0.284
51					0.279	0.275
52					0.275	0.272
53					0.267	0.269
54					0.265	0.261
55					0.257	0.258
56					0.255	0.251
57					0.248	0.243
58					0.247	0.242
59					0.240	0.235
60					0.240	0.231
61					0.234	0.228
62					0.228	0.222
63					0.228	0.216
64					0.223	0.214
65					0.217	0.212
66					0.212	0.206
67					0.207	0.201
68					0.203	0.200
69					0.200	0.200
70					0.200	0.200
71					0.200	0.200
72						
73						
74						
75						

3.001.220 GENERATION FACILITIES–DEPRECIATION FACTORS–EPCOR

Age of Component	Clover Bar	Genesee
0	0.750	0.750
1	0.750	0.750
2	0.732	0.750
3	0.658	0.750
4	0.595	0.750
5	0.542	0.750
6	0.496	0.750
7	0.457	0.750
8	0.421	0.733
9	0.390	0.710
10	0.361	0.687
11	0.337	0.666
12	0.314	0.645
13	0.294	0.627
14	0.276	0.609
15	0.259	0.590
16	0.242	0.572
17	0.228	0.556
18	0.215	0.541
19	0.201	0.526
20	0.200	0.511
21	0.200	0.496
22	0.200	0.482
23	0.200	0.470
24	0.200	0.458
25	0.200	0.446
26	0.200	0.433
27	0.200	0.421
28	0.200	0.409
29	0.200	0.398
30	0.200	0.387
31	0.200	0.377
32	0.200	0.368
33	0.200	0.356
34	0.200	0.348
35	0.200	0.337
36	0.200	0.326
37	0.200	0.316
38	0.200	0.306
39	0.200	0.296
40	0.200	0.287
41	0.200	0.278
42	0.200	0.270
43	0.200	0.262
44	0.200	0.250
45	0.200	0.243
46	0.200	0.232
47	0.200	0.225
48	0.200	0.214
49	0.200	0.209
50	0.200	0.200
51	0.200	0.200
52		

3.001.230 GENERATION FACILITIES–DEPRECIATION FACTORS–TAU

Age of Component	Barrier	Bearspaw	Bighorn	Brazeau	Cascade
0	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750
3	0.718	0.750	0.750	0.750	0.715
4	0.660	0.719	0.750	0.750	0.657
5	0.610	0.676	0.750	0.750	0.607
6	0.566	0.638	0.750	0.733	0.562
7	0.526	0.604	0.750	0.703	0.522
8	0.490	0.573	0.750	0.674	0.486
9	0.458	0.545	0.735	0.646	0.453
10	0.429	0.519	0.715	0.621	0.424
11	0.402	0.496	0.695	0.597	0.397
12	0.378	0.475	0.677	0.574	0.372
13	0.355	0.455	0.659	0.552	0.350
14	0.335	0.436	0.642	0.532	0.329
15	0.316	0.420	0.625	0.513	0.310
16	0.298	0.404	0.610	0.495	0.292
17	0.282	0.389	0.595	0.477	0.276
18	0.266	0.375	0.581	0.461	0.260
19	0.252	0.362	0.567	0.445	0.246
20	0.239	0.350	0.554	0.430	0.232
21	0.226	0.339	0.541	0.415	0.219
22	0.214	0.328	0.529	0.402	0.208
23	0.203	0.318	0.517	0.389	0.200
24	0.200	0.309	0.506	0.376	0.200
25	0.200	0.200	0.495	0.364	0.200
26	0.200	0.200	0.484	0.352	0.200
27	0.200	0.200	0.474	0.341	0.200
28	0.200	0.200	0.464	0.330	0.200
29	0.200	0.200	0.455	0.320	0.200
30	0.200	0.200	0.441	0.310	0.200
31	0.200	0.200	0.423	0.301	0.200
32	0.200	0.200	0.404	0.291	0.200
33	0.200	0.200	0.386	0.283	0.200
34	0.200	0.200	0.368	0.274	0.200
35	0.200	0.200	0.349	0.266	0.200
36	0.200	0.200	0.331	0.258	0.200
37	0.200	0.200	0.313	0.244	0.200
38	0.200	0.200	0.294	0.224	0.200
39	0.200	0.200	0.276	0.204	0.200
40	0.200	0.200	0.258	0.200	0.200
41	0.200	0.200	0.239	0.200	0.200
42	0.200	0.200	0.221		0.200
43	0.200	0.200	0.203		0.200
44	0.200	0.200	0.200		0.200

3.001.230 Generation Facilities–Depreciation Factors–TAU (cont.)

Age of Componen	Ghost	Horseshoe	Interlakes	Kananakis	Keephills
0	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750
3	0.750	0.693	0.691	0.735	0.750
4	0.710	0.631	0.628	0.681	0.750
5	0.667	0.577	0.573	0.633	0.750
6	0.629	0.528	0.525	0.592	0.749
7	0.595	0.485	0.481	0.554	0.720
8	0.564	0.446	0.442	0.521	0.693
9	0.537	0.412	0.407	0.490	0.668
10	0.512	0.380	0.375	0.463	0.644
11	0.489	0.351	0.346	0.438	0.622
12	0.468	0.325	0.319	0.415	0.601
13	0.449	0.300	0.295	0.394	0.582
14	0.431	0.278	0.272	0.375	0.563
15	0.415	0.257	0.251	0.357	0.544
16	0.400	0.238	0.232	0.340	0.528
17	0.386	0.220	0.214	0.325	0.510
18	0.373	0.204	0.200	0.310	0.496
19	0.361	0.200	0.200	0.297	0.481
20	0.349	0.200	0.200	0.284	0.467
21	0.339	0.200	0.200	0.272	0.452
22	0.328	0.200	0.200	0.261	0.441
23	0.319	0.200	0.200	0.251	0.428
24	0.310	0.200	0.200	0.241	0.414
25	0.301	0.200	0.200	0.232	0.403
26	0.293	0.200	0.200	0.223	0.391
27	0.286	0.200	0.200	0.214	0.379
28	0.279	0.200	0.200	0.206	0.369
29	0.272	0.200	0.200	0.200	0.359
30	0.265	0.200	0.200	0.200	0.350
31	0.259	0.200	0.200	0.200	0.338
32	0.253	0.200	0.200	0.200	0.327
33	0.247	0.200	0.200	0.200	0.321
34	0.242	0.200	0.200	0.200	0.311
35	0.237	0.200	0.200	0.200	0.302
36	0.232	0.200	0.200	0.200	0.290
37	0.227	0.200	0.200	0.200	0.282
38	0.222	0.200	0.200	0.200	0.275
39	0.218	0.200	0.200	0.200	0.265
40	0.214	0.200	0.200	0.200	0.254
41	0.210	0.200	0.200	0.200	0.249
42	0.206	0.200	0.200	0.200	0.240
43	0.202	0.200	0.200	0.200	0.231
44	0.200	0.200	0.200	0.200	0.223
45	0.200	0.200	0.200	0.200	0.215
46	0.200	0.200	0.200	0.200	0.207
47	0.200	0.200	0.200	0.200	0.200
48	0.200	0.200	0.200	0.200	0.200
49	0.200	0.200	0.200	0.200	0.200
50	0.200	0.200	0.200	0.200	0.200

3.001.230 Generation Facilities–Depreciation Factors–TAU (cont.)

Age of Component	Pocaterra	Rundle	Sundance	Spray	Three Sisters	Wabamun
0	0.750	0.750	0.750	0.750	0.750	0.613
1	0.750	0.750	0.750	0.750	0.750	0.304
2	0.750	0.739	0.750	0.750	0.730	0.200
3	0.715	0.660	0.750	0.737	0.650	0.200
4	0.657	0.591	0.750	0.684	0.581	0.200
5	0.607	0.530	0.748	0.637	0.521	
6	0.562	0.476	0.714	0.595	0.468	
7	0.522	0.428	0.683	0.558	0.421	
8	0.486	0.385	0.654	0.525	0.380	
9	0.453	0.347	0.627	0.495	0.342	
10	0.424	0.311	0.603	0.468	0.309	
11	0.397	0.279	0.579	0.443	0.278	
12	0.372	0.250	0.557	0.420	0.250	
13	0.350	0.223	0.536	0.399	0.224	
14	0.329	0.200	0.517	0.380	0.201	
15	0.310	0.200	0.499	0.363	0.200	
16	0.292	0.200	0.481	0.346	0.200	
17	0.276	0.200	0.466	0.331	0.200	
18	0.260		0.449	0.317		
19	0.246		0.434	0.303		
20	0.232		0.420	0.291		
21	0.219		0.408	0.279		
22	0.208		0.394	0.268		
23	0.200		0.382	0.258		
24	0.200		0.369	0.248		
25	0.200		0.357	0.239		
26			0.348	0.230		
27			0.335	0.221		
28			0.326	0.214		
29			0.315	0.206		
30			0.305	0.200		
31			0.295	0.200		
32			0.287	0.200		
33			0.279	0.200		
34			0.269	0.200		
35			0.263	0.200		
36			0.253	0.200		
37			0.245	0.200		
38			0.237	0.200		
39			0.230	0.200		
40			0.223	0.200		
41			0.213	0.200		
42			0.207	0.200		
43			0.200	0.200		
44			0.200	0.200		
45				0.200		
46				0.200		
47				0.200		

3.001.300 OTHER GENERATION FACILITIES–DEPRECIATION FACTORS–LESS THAN 50 MEGAWATT UNITS

Note: If assessment year minus age of unit is greater than 30 then use 30.

Age of Component	**Generation Unit Depreciation Life**					
	1	**2**	**3**	**4**	**5**	**6**
0	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.750	0.750
6	0.750	0.750	0.750	0.750	0.750	0.750
7	0.733	0.733	0.730	0.728	0.725	0.723
8	0.696	0.695	0.693	0.691	0.689	0.686
9	0.660	0.659	0.657	0.655	0.653	0.650
10	0.624	0.623	0.622	0.620	0.618	0.615
11	0.588	0.588	0.587	0.585	0.583	0.581
12	0.553	0.552	0.552	0.551	0.550	0.547
13	0.519	0.519	0.519	0.517	0.516	0.515
14	0.486	0.486	0.485	0.485	0.483	0.482
15	0.453	0.453	0.453	0.453	0.451	0.451
16	0.422	0.422	0.422	0.420	0.420	0.420
17	0.390	0.390	0.390	0.390	0.390	0.390
18	0.361	0.361	0.361	0.361	0.361	0.361
19	0.333	0.333	0.333	0.333	0.333	0.330
20	0.303	0.303	0.303	0.303	0.303	0.303
21	0.276	0.276	0.276	0.276	0.276	0.276
22	0.250	0.250	0.250	0.250	0.250	0.250
23	0.225	0.225	0.225	0.225	0.225	0.225
24	0.201	0.201	0.201	0.201	0.201	0.201
25	0.200	0.200	0.200	0.200	0.200	0.200

3.001.300 Other Generation Facilities–Depreciation Factors–Less than 50 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 30 then use 30.

Age of Component	Generation Unit Depreciation Life					
	7	8	9	10	11	12
0	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.750	0.750
6	0.750	0.750	0.748	0.742	0.736	0.728
7	0.719	0.715	0.710	0.703	0.697	0.689
8	0.682	0.678	0.672	0.667	0.660	0.653
9	0.647	0.643	0.637	0.632	0.625	0.618
10	0.612	0.608	0.603	0.598	0.591	0.584
11	0.578	0.575	0.570	0.565	0.559	0.552
12	0.545	0.542	0.538	0.533	0.527	0.521
13	0.512	0.509	0.506	0.502	0.497	0.490
14	0.480	0.479	0.476	0.471	0.467	0.461
15	0.450	0.447	0.445	0.442	0.437	0.432
16	0.419	0.417	0.415	0.412	0.408	0.405
17	0.388	0.387	0.387	0.383	0.381	0.377
18	0.359	0.359	0.357	0.355	0.353	0.349
19	0.330	0.330	0.328	0.328	0.326	0.322
20	0.303	0.303	0.303	0.301	0.299	0.296
21	0.276	0.276	0.276	0.274	0.274	0.272
22	0.250	0.250	0.250	0.250	0.248	0.248
23	0.225	0.225	0.225	0.225	0.223	0.223
24	0.201	0.201	0.201	0.201	0.201	0.200
25	0.200	0.200	0.200	0.200	0.200	0.200

3.001.300 Other Generation Facilities–Depreciation Factors–Less than 50 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 30 then use 30.

Age of Component	Generation Unit Depreciation Life					
	13	**14**	**15**	**16**	**17**	**18**
0	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.744	0.733	0.720	0.706
6	0.720	0.710	0.700	0.688	0.675	0.660
7	0.680	0.670	0.660	0.647	0.633	0.617
8	0.644	0.634	0.622	0.610	0.595	0.579
9	0.608	0.599	0.587	0.575	0.560	0.544
10	0.576	0.565	0.554	0.541	0.527	0.511
11	0.544	0.533	0.523	0.510	0.496	0.480
12	0.513	0.504	0.493	0.481	0.467	0.451
13	0.483	0.475	0.464	0.453	0.439	0.424
14	0.455	0.446	0.437	0.425	0.413	0.399
15	0.426	0.419	0.410	0.400	0.388	0.375
16	0.398	0.393	0.384	0.374	0.364	0.350
17	0.372	0.367	0.359	0.350	0.341	0.328
18	0.346	0.340	0.334	0.326	0.317	0.307
19	0.320	0.316	0.310	0.304	0.296	0.286
20	0.294	0.290	0.286	0.279	0.273	0.264
21	0.269	0.267	0.263	0.258	0.251	0.245
22	0.246	0.243	0.241	0.236	0.229	0.224
23	0.223	0.220	0.218	0.213	0.208	0.203
24	0.200	0.200	0.200	0.200	0.200	0.200
25						

3.001.300 Other Generation Facilities–Depreciation Factors–Less than 50 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 30 then use 30.

Age of Component	Generation Unit Depreciation Life					
	19	**20**	**21**	**22**	**23**	**24**
0	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.735	0.708
4	0.744	0.728	0.709	0.687	0.661	0.630
5	0.691	0.672	0.652	0.627	0.599	0.565
6	0.643	0.623	0.601	0.575	0.546	0.511
7	0.600	0.580	0.557	0.530	0.500	0.464
8	0.560	0.540	0.517	0.490	0.460	0.424
9	0.525	0.504	0.481	0.454	0.424	0.389
10	0.492	0.471	0.448	0.422	0.392	0.358
11	0.462	0.442	0.419	0.393	0.364	0.330
12	0.433	0.414	0.392	0.366	0.337	0.306
13	0.407	0.388	0.366	0.341	0.314	0.284
14	0.382	0.364	0.342	0.320	0.293	0.262
15	0.359	0.341	0.321	0.298	0.273	0.244
16	0.337	0.320	0.301	0.279	0.253	0.226
17	0.314	0.299	0.281	0.260	0.236	0.210
18	0.294	0.278	0.263	0.242	0.220	0.200
19	0.273	0.259	0.243	0.225	0.204	
20	0.254	0.241	0.226	0.208	0.200	
21	0.233	0.222	0.208	0.200		
22	0.215	0.205	0.200			
23	0.200	0.200				
24						
25						

3.001.300 Other Generation Facilities–Depreciation Factors–Less than 50 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 30 then use 30.

Age of Component	Generation Unit Depreciation Life					
	25	**26**	**27**	**28**	**29**	**30**
0	0.750	0.750	0.750	0.750	0.750	0.633
1	0.750	0.750	0.750	0.750	0.750	0.633
2	0.750	0.745	0.699	0.633	0.528	0.340
3	0.674	0.632	0.576	0.499	0.388	0.214
4	0.592	0.545	0.485	0.407	0.299	0.200
5	0.525	0.476	0.416	0.339	0.238	
6	0.470	0.421	0.361	0.287	0.200	
7	0.424	0.375	0.317	0.246		
8	0.384	0.337	0.280	0.213		
9	0.349	0.303	0.249	0.200		
10	0.320	0.275	0.223			
11	0.293	0.249	0.200			
12	0.269	0.227				
13	0.248	0.200				
14	0.228					
15	0.210					
16	0.200					
17						
18						
19						
20						

3.001.400 OTHER GENERATION FACILITIES–DEPRECIATION FACTORS–50–100 MEGAWATT UNITS

Note: If assessment year minus age of unit is greater than 35 then use 35.

Age of Component	Generation Unit Depreciation Life						
	1	2	3	4	5	6	7
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.750	0.750	0.750
6	0.750	0.750	0.750	0.750	0.750	0.750	0.750
7	0.750	0.750	0.750	0.750	0.750	0.750	0.750
8	0.743	0.740	0.738	0.734	0.731	0.728	0.724
9	0.714	0.712	0.709	0.706	0.703	0.700	0.695
10	0.688	0.684	0.682	0.679	0.676	0.672	0.668
11	0.662	0.658	0.656	0.652	0.650	0.645	0.642
12	0.636	0.633	0.631	0.628	0.624	0.621	0.617
13	0.611	0.608	0.605	0.603	0.600	0.596	0.592
14	0.587	0.584	0.583	0.580	0.575	0.572	0.568
15	0.563	0.561	0.558	0.557	0.553	0.550	0.545
16	0.540	0.538	0.536	0.533	0.531	0.528	0.524
17	0.517	0.515	0.514	0.512	0.508	0.506	0.503
18	0.496	0.494	0.492	0.490	0.488	0.484	0.480
19	0.475	0.473	0.471	0.469	0.467	0.463	0.461
20	0.453	0.453	0.451	0.449	0.447	0.444	0.440
21	0.434	0.432	0.429	0.429	0.427	0.425	0.420
22	0.414	0.411	0.411	0.409	0.406	0.404	0.402
23	0.394	0.391	0.391	0.389	0.389	0.386	0.384
24	0.374	0.374	0.372	0.372	0.369	0.367	0.364
25	0.356	0.356	0.353	0.353	0.350	0.350	0.348
26	0.338	0.335	0.335	0.335	0.332	0.332	0.330
27	0.318	0.318	0.318	0.318	0.315	0.315	0.312
28	0.301	0.301	0.301	0.298	0.298	0.298	0.295
29	0.285	0.285	0.282	0.282	0.282	0.282	0.279
30	0.267	0.267	0.267	0.267	0.267	0.267	0.263
31	0.252	0.252	0.252	0.252	0.249	0.249	0.249
32	0.238	0.234	0.234	0.234	0.234	0.234	0.234
33	0.221	0.221	0.221	0.221	0.221	0.221	0.217
34	0.208	0.204	0.204	0.204	0.204	0.204	0.204
35	0.200	0.200	0.200	0.200	0.200	0.200	0.200

3.001.400 Other Generation Facilities–Depreciation Factors–50–100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 35 then use 35.

Age of Component	Generation Unit Depreciation Life						
	8	9	10	11	12	13	14
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.750	0.750	0.750
6	0.750	0.750	0.750	0.750	0.750	0.750	0.750
7	0.750	0.746	0.741	0.736	0.730	0.724	0.718
8	0.720	0.715	0.710	0.705	0.699	0.692	0.686
9	0.691	0.687	0.681	0.676	0.669	0.662	0.655
10	0.664	0.659	0.653	0.648	0.642	0.634	0.627
11	0.637	0.633	0.627	0.621	0.614	0.607	0.600
12	0.612	0.607	0.602	0.595	0.589	0.583	0.575
13	0.588	0.583	0.578	0.571	0.566	0.559	0.550
14	0.565	0.559	0.555	0.549	0.541	0.535	0.526
15	0.542	0.537	0.531	0.526	0.520	0.512	0.506
16	0.519	0.514	0.509	0.504	0.499	0.492	0.483
17	0.497	0.494	0.488	0.483	0.477	0.470	0.463
18	0.476	0.473	0.469	0.463	0.457	0.451	0.444
19	0.457	0.453	0.449	0.442	0.438	0.432	0.424
20	0.438	0.434	0.429	0.425	0.419	0.412	0.406
21	0.418	0.414	0.409	0.405	0.400	0.396	0.389
22	0.399	0.395	0.392	0.387	0.383	0.378	0.371
23	0.381	0.379	0.374	0.369	0.366	0.361	0.354
24	0.361	0.359	0.356	0.354	0.349	0.343	0.338
25	0.345	0.342	0.340	0.337	0.332	0.326	0.324
26	0.327	0.327	0.324	0.318	0.316	0.313	0.307
27	0.312	0.309	0.306	0.303	0.300	0.295	0.292
28	0.295	0.292	0.289	0.286	0.283	0.280	0.277
29	0.279	0.276	0.276	0.273	0.270	0.266	0.263
30	0.263	0.260	0.260	0.257	0.254	0.250	0.247
31	0.249	0.245	0.245	0.242	0.238	0.238	0.235
32	0.231	0.231	0.231	0.227	0.227	0.224	0.220
33	0.217	0.217	0.217	0.214	0.214	0.210	0.206
34	0.204	0.204	0.200	0.200	0.200	0.200	0.200
35	0.200	0.200					

3.001.400 Other Generation Facilities–Depreciation Factors–50–100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 35 then use 35.

Age of Component	**Generation Unit Depreciation Life**						
	15	**16**	**17**	**18**	**19**	**20**	**21**
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.750	0.741	0.730
6	0.745	0.737	0.730	0.721	0.710	0.699	0.687
7	0.710	0.702	0.693	0.683	0.673	0.661	0.647
8	0.677	0.669	0.660	0.649	0.638	0.625	0.612
9	0.647	0.638	0.629	0.618	0.606	0.593	0.579
10	0.619	0.609	0.600	0.588	0.577	0.563	0.549
11	0.591	0.582	0.573	0.561	0.548	0.536	0.521
12	0.566	0.556	0.546	0.536	0.523	0.509	0.495
13	0.542	0.533	0.522	0.511	0.500	0.486	0.471
14	0.519	0.510	0.500	0.488	0.476	0.462	0.448
15	0.496	0.488	0.477	0.466	0.455	0.442	0.427
16	0.475	0.466	0.456	0.446	0.434	0.420	0.407
17	0.456	0.446	0.437	0.427	0.414	0.401	0.388
18	0.436	0.426	0.419	0.407	0.396	0.384	0.371
19	0.418	0.408	0.400	0.390	0.379	0.367	0.353
20	0.399	0.391	0.382	0.372	0.361	0.350	0.337
21	0.382	0.373	0.364	0.355	0.346	0.335	0.321
22	0.364	0.357	0.350	0.340	0.331	0.319	0.307
23	0.349	0.342	0.334	0.324	0.314	0.305	0.292
24	0.333	0.325	0.318	0.310	0.299	0.289	0.279
25	0.316	0.310	0.302	0.294	0.286	0.275	0.264
26	0.302	0.296	0.288	0.282	0.273	0.262	0.254
27	0.286	0.280	0.274	0.268	0.260	0.251	0.239
28	0.271	0.268	0.262	0.253	0.247	0.238	0.229
29	0.257	0.254	0.248	0.241	0.235	0.226	0.216
30	0.244	0.241	0.234	0.228	0.221	0.215	0.205
31	0.232	0.225	0.222	0.215	0.208	0.202	0.200
32	0.217	0.213	0.210	0.203	0.200	0.200	
33	0.203	0.200	0.200	0.200			
34	0.200						
35							

3.001.400 Other Generation Facilities–Depreciation Factors–50–100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 35 then use 35.

Age of Component	Generation Unit Depreciation Life						
	22	23	24	25	26	27	28
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750	0.732
4	0.750	0.750	0.741	0.724	0.705	0.684	0.658
5	0.717	0.703	0.688	0.669	0.649	0.624	0.596
6	0.673	0.658	0.641	0.621	0.599	0.573	0.544
7	0.633	0.617	0.599	0.578	0.555	0.529	0.498
8	0.597	0.580	0.561	0.540	0.517	0.489	0.459
9	0.563	0.547	0.527	0.505	0.482	0.455	0.424
10	0.533	0.515	0.496	0.474	0.450	0.423	0.393
11	0.504	0.487	0.468	0.447	0.423	0.396	0.366
12	0.479	0.461	0.442	0.421	0.397	0.370	0.341
13	0.456	0.438	0.418	0.396	0.373	0.347	0.318
14	0.433	0.415	0.396	0.375	0.351	0.326	0.298
15	0.411	0.394	0.375	0.354	0.332	0.306	0.279
16	0.391	0.374	0.356	0.335	0.313	0.289	0.262
17	0.372	0.356	0.338	0.318	0.296	0.272	0.247
18	0.355	0.340	0.320	0.301	0.280	0.257	0.232
19	0.339	0.322	0.306	0.286	0.265	0.243	0.219
20	0.322	0.307	0.290	0.273	0.251	0.230	0.206
21	0.308	0.292	0.276	0.258	0.238	0.218	0.200
22	0.293	0.279	0.262	0.246	0.227	0.205	
23	0.280	0.265	0.250	0.233	0.215	0.200	
24	0.266	0.253	0.237	0.222	0.204		
25	0.253	0.240	0.227	0.210	0.200		
26	0.240	0.229	0.215	0.201			
27	0.230	0.216	0.204	0.200			
28	0.217	0.207	0.200				
29	0.207	0.200					
30	0.200						

3.001.400 Other Generation Facilities–Depreciation Factors–50–100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 35 then use 35.

Age of Component	**Generation Unit Depreciation Life**						
	29	**30**	**31**	**32**	**33**	**34**	**35**
0	0.750	0.750	0.750	0.750	0.750	0.750	0.632
1	0.750	0.750	0.750	0.750	0.750	0.750	0.632
2	0.750	0.750	0.743	0.697	0.631	0.527	0.339
3	0.705	0.672	0.629	0.574	0.498	0.388	0.214
4	0.627	0.590	0.543	0.484	0.406	0.299	0.200
5	0.563	0.523	0.475	0.414	0.338	0.237	
6	0.509	0.468	0.419	0.360	0.286	0.200	
7	0.463	0.422	0.374	0.316	0.246		
8	0.423	0.383	0.336	0.280	0.212		
9	0.389	0.349	0.303	0.249	0.200		
10	0.358	0.320	0.275	0.223			
11	0.331	0.293	0.250	0.200			
12	0.308	0.270	0.228				
13	0.286	0.249	0.209				
14	0.266	0.231	0.200				
15	0.249	0.215					
16	0.233	0.200					
17	0.218						
18	0.203						
19	0.200						
20							

3.001.500 OTHER GENERATION FACILITIES–DEPRECIATION FACTORS–GREATER THAN 100 MEGAWATT UNITS

Note: If assessment year minus age of unit is greater than 40 then use 40.

Age of Component	Generation Unit Depreciation Life						
	1	2	3	4	5	6	7
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.750	0.750	0.750
6	0.750	0.750	0.750	0.750	0.750	0.750	0.750
7	0.750	0.750	0.750	0.750	0.750	0.750	0.750
8	0.750	0.750	0.750	0.750	0.750	0.750	0.750
9	0.750	0.750	0.750	0.750	0.750	0.750	0.750
10	0.749	0.746	0.743	0.740	0.736	0.731	0.727
11	0.729	0.725	0.722	0.718	0.715	0.710	0.705
12	0.709	0.705	0.702	0.698	0.694	0.690	0.685
13	0.689	0.687	0.682	0.678	0.674	0.670	0.665
14	0.670	0.667	0.663	0.660	0.656	0.651	0.647
15	0.652	0.649	0.646	0.641	0.636	0.632	0.627
16	0.635	0.632	0.628	0.623	0.620	0.615	0.610
17	0.619	0.615	0.610	0.606	0.603	0.597	0.592
18	0.602	0.598	0.594	0.590	0.586	0.580	0.577
19	0.585	0.581	0.577	0.573	0.569	0.565	0.558
20	0.569	0.567	0.562	0.558	0.554	0.550	0.543
21	0.554	0.551	0.547	0.542	0.538	0.533	0.529
22	0.539	0.534	0.532	0.527	0.522	0.518	0.513
23	0.525	0.520	0.517	0.512	0.507	0.505	0.500
24	0.509	0.506	0.504	0.499	0.493	0.491	0.486
25	0.496	0.493	0.488	0.485	0.480	0.477	0.472
26	0.481	0.478	0.475	0.470	0.467	0.464	0.459
27	0.470	0.464	0.461	0.458	0.455	0.449	0.446
28	0.456	0.452	0.449	0.443	0.440	0.437	0.431
29	0.442	0.439	0.436	0.433	0.429	0.423	0.420
30	0.429	0.426	0.422	0.419	0.416	0.413	0.409
31	0.416	0.413	0.410	0.406	0.403	0.399	0.396
32	0.404	0.401	0.397	0.394	0.390	0.387	0.383
33	0.392	0.389	0.385	0.382	0.382	0.378	0.371
34	0.381	0.377	0.374	0.370	0.370	0.366	0.362
35	0.366	0.366	0.362	0.359	0.359	0.355	0.351
36	0.356	0.352	0.352	0.348	0.344	0.344	0.340
37	0.346	0.342	0.342	0.338	0.334	0.334	0.329
38	0.332	0.332	0.328	0.328	0.324	0.319	0.319
39	0.322	0.318	0.318	0.314	0.314	0.310	0.306
40	0.309	0.309	0.309	0.305	0.300	0.300	0.296
41	0.301	0.296	0.296	0.296	0.292	0.292	0.287
42	0.288	0.288	0.288	0.283	0.283	0.279	0.279
43	0.280	0.275	0.275	0.275	0.271	0.271	0.266
44	0.268	0.268	0.263	0.263	0.263	0.258	0.258
45	0.256	0.256	0.256	0.256	0.251	0.251	0.246
46	0.249	0.249	0.244	0.244	0.244	0.239	0.239
47	0.238	0.238	0.238	0.233	0.233	0.233	0.228
48	0.227	0.227	0.227	0.227	0.221	0.221	0.221
49	0.221	0.216	0.216	0.216	0.216	0.210	0.210
50	0.210	0.210	0.205	0.205	0.205	0.205	0.205
51	0.200	0.200	0.200	0.200	0.200	0.200	0.200

3.001.500 Other Generation Facilities–Depreciation Factors–Greater than 100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 40 then use 40.

Age of Component	Generation Unit Depreciation Life						
	8	**9**	**10**	**11**	**12**	**13**	**14**
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.750	0.750	0.750
6	0.750	0.750	0.750	0.750	0.750	0.750	0.750
7	0.750	0.750	0.750	0.750	0.750	0.750	0.750
8	0.750	0.750	0.750	0.750	0.750	0.746	0.740
9	0.746	0.741	0.736	0.732	0.726	0.720	0.714
10	0.723	0.718	0.714	0.707	0.702	0.696	0.690
11	0.701	0.696	0.691	0.686	0.679	0.673	0.666
12	0.680	0.675	0.670	0.664	0.657	0.651	0.645
13	0.660	0.655	0.649	0.644	0.637	0.630	0.623
14	0.641	0.636	0.630	0.624	0.617	0.611	0.603
15	0.622	0.617	0.611	0.604	0.598	0.592	0.584
16	0.604	0.599	0.592	0.587	0.581	0.574	0.565
17	0.586	0.581	0.575	0.570	0.563	0.555	0.548
18	0.571	0.565	0.559	0.553	0.546	0.538	0.530
19	0.554	0.548	0.542	0.536	0.530	0.522	0.516
20	0.539	0.532	0.526	0.522	0.513	0.507	0.500
21	0.524	0.517	0.513	0.506	0.499	0.493	0.484
22	0.508	0.503	0.496	0.492	0.484	0.477	0.470
23	0.495	0.488	0.483	0.478	0.470	0.463	0.456
24	0.480	0.475	0.470	0.462	0.457	0.449	0.442
25	0.466	0.461	0.456	0.450	0.442	0.437	0.429
26	0.453	0.447	0.442	0.436	0.431	0.425	0.417
27	0.440	0.435	0.429	0.423	0.417	0.411	0.405
28	0.428	0.422	0.416	0.413	0.407	0.398	0.392
29	0.417	0.411	0.404	0.401	0.395	0.389	0.379
30	0.403	0.400	0.393	0.387	0.383	0.377	0.371
31	0.393	0.386	0.383	0.376	0.369	0.366	0.359
32	0.380	0.376	0.369	0.366	0.359	0.356	0.349
33	0.367	0.364	0.360	0.353	0.349	0.342	0.339
34	0.359	0.351	0.348	0.344	0.337	0.333	0.326
35	0.347	0.343	0.340	0.332	0.328	0.321	0.317
36	0.336	0.332	0.328	0.324	0.317	0.313	0.309
37	0.326	0.321	0.317	0.313	0.309	0.301	0.297
38	0.315	0.311	0.307	0.303	0.299	0.295	0.286
39	0.306	0.301	0.297	0.293	0.289	0.284	0.280
40	0.296	0.292	0.287	0.283	0.279	0.274	0.270
41	0.283	0.283	0.278	0.274	0.269	0.265	0.261
42	0.274	0.270	0.270	0.265	0.261	0.256	0.251
43	0.266	0.261	0.257	0.257	0.252	0.247	0.243
44	0.254	0.254	0.249	0.244	0.244	0.239	0.234
45	0.246	0.241	0.241	0.236	0.231	0.231	0.227
46	0.234	0.234	0.229	0.229	0.224	0.219	0.219
47	0.228	0.223	0.223	0.217	0.217	0.212	0.207
48	0.216	0.216	0.216	0.211	0.206	0.206	0.201
49	0.210	0.205	0.205	0.205	0.200	0.200	0.200
50	0.200	0.200	0.200	0.200			

3.001.500 Other Generation Facilities–Depreciation Factors–Greater than 100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 40 then use 40.

Age of Component	**Generation Unit Depreciation Life**						
	15	**16**	**17**	**18**	**19**	**20**	**21**
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.750	0.750	0.750
6	0.750	0.750	0.750	0.750	0.750	0.750	0.750
7	0.750	0.750	0.748	0.741	0.734	0.725	0.716
8	0.734	0.727	0.720	0.712	0.704	0.695	0.685
9	0.707	0.700	0.692	0.685	0.676	0.666	0.656
10	0.682	0.675	0.667	0.658	0.650	0.639	0.629
11	0.659	0.651	0.643	0.634	0.625	0.614	0.604
12	0.637	0.628	0.621	0.612	0.602	0.591	0.580
13	0.615	0.607	0.599	0.589	0.579	0.570	0.557
14	0.595	0.587	0.578	0.569	0.559	0.549	0.537
15	0.576	0.568	0.558	0.549	0.539	0.528	0.517
16	0.558	0.550	0.540	0.531	0.521	0.509	0.499
17	0.541	0.532	0.523	0.514	0.503	0.492	0.481
18	0.523	0.515	0.505	0.496	0.486	0.474	0.463
19	0.508	0.499	0.489	0.479	0.469	0.459	0.447
20	0.492	0.483	0.474	0.464	0.455	0.444	0.432
21	0.477	0.468	0.459	0.450	0.438	0.429	0.418
22	0.463	0.454	0.444	0.435	0.425	0.416	0.404
23	0.448	0.441	0.431	0.421	0.411	0.401	0.391
24	0.434	0.426	0.418	0.408	0.398	0.387	0.377
25	0.421	0.413	0.404	0.396	0.386	0.375	0.364
26	0.408	0.403	0.391	0.383	0.374	0.363	0.352
27	0.397	0.388	0.382	0.373	0.362	0.353	0.341
28	0.386	0.377	0.368	0.362	0.353	0.341	0.331
29	0.373	0.367	0.357	0.348	0.342	0.329	0.320
30	0.364	0.354	0.348	0.338	0.328	0.322	0.309
31	0.352	0.346	0.336	0.329	0.319	0.309	0.299
32	0.342	0.335	0.328	0.317	0.310	0.300	0.290
33	0.331	0.324	0.317	0.306	0.299	0.292	0.281
34	0.322	0.315	0.307	0.300	0.289	0.281	0.274
35	0.309	0.306	0.298	0.290	0.283	0.271	0.264
36	0.301	0.293	0.289	0.282	0.274	0.266	0.254
37	0.293	0.285	0.277	0.269	0.265	0.257	0.245
38	0.282	0.274	0.270	0.262	0.253	0.245	0.237
39	0.272	0.267	0.259	0.255	0.246	0.238	0.229
40	0.266	0.257	0.253	0.244	0.240	0.231	0.222
41	0.256	0.252	0.243	0.238	0.229	0.225	0.216
42	0.247	0.242	0.238	0.229	0.224	0.215	0.210
43	0.238	0.233	0.229	0.219	0.215	0.210	0.201
44	0.230	0.225	0.220	0.215	0.206	0.201	0.200
45	0.222	0.217	0.212	0.207	0.202	0.200	
46	0.214	0.209	0.204	0.200	0.200		
47	0.207	0.202	0.200				
48	0.200	0.200					
49							
50							

3.001.500 Other Generation Facilities–Depreciation Factors–Greater than 100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 40 then use 40.

Age of Component	Generation Unit Depreciation Life						
	22	23	24	25	26	27	28
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.750	0.750	0.750
4	0.750	0.750	0.750	0.750	0.750	0.750	0.750
5	0.750	0.750	0.750	0.750	0.738	0.724	0.710
6	0.741	0.731	0.721	0.708	0.696	0.681	0.665
7	0.707	0.696	0.684	0.672	0.658	0.642	0.625
8	0.675	0.663	0.651	0.638	0.623	0.606	0.588
9	0.645	0.634	0.620	0.606	0.591	0.575	0.556
10	0.618	0.605	0.592	0.578	0.562	0.544	0.526
11	0.592	0.580	0.566	0.551	0.535	0.517	0.499
12	0.569	0.555	0.541	0.527	0.510	0.493	0.474
13	0.545	0.533	0.519	0.504	0.487	0.469	0.450
14	0.525	0.511	0.497	0.482	0.465	0.448	0.428
15	0.504	0.491	0.477	0.462	0.445	0.427	0.408
16	0.485	0.473	0.458	0.442	0.427	0.410	0.390
17	0.468	0.456	0.441	0.425	0.408	0.392	0.374
18	0.451	0.438	0.424	0.409	0.392	0.376	0.357
19	0.434	0.422	0.408	0.394	0.377	0.359	0.341
20	0.421	0.406	0.393	0.378	0.363	0.346	0.327
21	0.405	0.393	0.378	0.364	0.348	0.333	0.315
22	0.392	0.378	0.366	0.350	0.335	0.319	0.302
23	0.379	0.366	0.352	0.337	0.322	0.307	0.290
24	0.367	0.354	0.341	0.325	0.310	0.294	0.279
25	0.353	0.342	0.329	0.316	0.299	0.283	0.267
26	0.341	0.330	0.316	0.304	0.288	0.273	0.257
27	0.330	0.318	0.306	0.292	0.277	0.262	0.248
28	0.319	0.307	0.295	0.283	0.268	0.253	0.238
29	0.310	0.298	0.285	0.273	0.260	0.244	0.229
30	0.299	0.289	0.276	0.263	0.250	0.234	0.221
31	0.289	0.279	0.265	0.255	0.242	0.228	0.212
32	0.279	0.269	0.259	0.245	0.231	0.220	0.203
33	0.271	0.260	0.249	0.239	0.224	0.210	0.200
34	0.263	0.252	0.241	0.230	0.215	0.204	
35	0.252	0.245	0.233	0.222	0.211	0.200	
36	0.246	0.235	0.227	0.215	0.203		
37	0.237	0.229	0.217	0.205	0.200		
38	0.229	0.220	0.208	0.200			
39	0.221	0.212	0.204				
40	0.214	0.205	0.200				
41	0.207	0.200					
42	0.201						
43	0.200						
44							
45							

3.001.500 Other Generation Facilities–Depreciation Factors–Greater than 100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 40 then use 40.

Age of Component	Generation Unit Depreciation Life						
	29	**30**	**31**	**32**	**33**	**34**	**35**
0	0.750	0.750	0.750	0.750	0.750	0.750	0.750
1	0.750	0.750	0.750	0.750	0.750	0.750	0.750
2	0.750	0.750	0.750	0.750	0.750	0.750	0.750
3	0.750	0.750	0.750	0.750	0.734	0.707	0.674
4	0.746	0.729	0.710	0.687	0.661	0.630	0.592
5	0.693	0.674	0.653	0.628	0.600	0.566	0.525
6	0.647	0.627	0.604	0.578	0.548	0.512	0.471
7	0.606	0.585	0.560	0.533	0.502	0.467	0.425
8	0.569	0.547	0.522	0.494	0.463	0.427	0.385
9	0.535	0.513	0.489	0.460	0.429	0.393	0.352
10	0.506	0.483	0.458	0.429	0.398	0.363	0.323
11	0.478	0.455	0.429	0.402	0.371	0.336	0.297
12	0.452	0.429	0.404	0.376	0.346	0.312	0.274
13	0.429	0.407	0.381	0.354	0.325	0.291	0.253
14	0.407	0.385	0.361	0.333	0.304	0.271	0.235
15	0.388	0.365	0.341	0.316	0.285	0.254	0.218
16	0.369	0.347	0.323	0.298	0.269	0.238	0.204
17	0.352	0.330	0.307	0.281	0.254	0.223	0.200
18	0.338	0.315	0.292	0.267	0.240	0.211	
19	0.322	0.300	0.278	0.253	0.227	0.200	
20	0.307	0.288	0.264	0.241	0.215		
21	0.294	0.274	0.251	0.229	0.204		
22	0.283	0.262	0.241	0.217	0.200		
23	0.270	0.250	0.230	0.208			
24	0.261	0.240	0.219	0.200			
25	0.248	0.229	0.210				
26	0.240	0.220	0.201				
27	0.230	0.210	0.200				
28	0.220	0.201					
29	0.213	0.200					
30	0.205						
31	0.200						
32							
33							
34							
35							

3.001.500 Other Generation Facilities–Depreciation Factors–Greater than 100 MegaWatt Units (cont.)

Note: If assessment year minus age of unit is greater than 40 then use 40.

Age of Component	Generation Unit Depreciation Life				
	36	**37**	**38**	**39**	**40**
0	0.750	0.750	0.750	0.750	0.633
1	0.750	0.750	0.750	0.750	0.633
2	0.744	0.698	0.632	0.528	0.339
3	0.631	0.575	0.499	0.388	0.214
4	0.545	0.485	0.406	0.299	0.200
5	0.476	0.416	0.339	0.238	
6	0.422	0.361	0.287	0.200	
7	0.376	0.317	0.246		
8	0.338	0.281	0.213		
9	0.305	0.250	0.200		
10	0.277	0.225			
11	0.253	0.202			
12	0.231	0.200			
13	0.212				
14	0.200				
15					

3.002 STREET LIGHTING DEPRECIATION FACTORS

The depreciation factor for street lighting is 0.75.

3.003 TELECOMMUNICATION SYSTEMS DEPRECIATION FACTORS

3.003.100 TELEPHONE SYSTEMS

The depreciation factor for telephone systems is 0.75.

3.003.200 CABLE TELEVISION SYSTEMS

The depreciation factor for cable television systems is 0.75.

3.004 PIPELINE DEPRECIATION FACTORS

The depreciation factor for pipeline is 0.75.

4.000 SCHEDULE D–ADDITIONAL DEPRECIATION

The additional depreciation for Linear Property described in Schedule C, as specified in Schedule D, is exhaustive. No additional depreciation is to be given by the assessors.

4.001 ELECTRIC POWER SYSTEMS DEPRECIATION FACTORS

For generation plants and substations the assessor may adjust for additional depreciation provided acceptable evidence of loss exists.

4.002 TELECOMMUNICATION SYSTEMS DEPRECIATION FACTORS

4.002.100 CABLE TELEVISION SYSTEMS

Service Drops, Transmission and Distribution Line
Additional depreciation of cable television systems shall be determined using the table and formula below.

Penetration Rate	Depreciation Factor
80 and above	**1.00**
75 to 79.99	**0.95**
70 to 74.99	**0.90**
65 to 69.99	**0.85**
60 to 64.99	**0.80**
55 to 59.99	**0.75**
50 to 54.99	**0.70**
45 to 49.99	**0.65**
40 to 44.99	**0.60**
35 to 39.99	**0.55**
Under 35	**0.50**

Note: Formula to Determine Penetration Rate Percentage =

$$\frac{\text{total operational services}}{\text{total services per cable system}} \times 100$$

4.003 PIPELINE (PL)

4.003.100 PIPE

Additional depreciation of pipe shall be determined using the table below. Depreciation factors in this table are not cumulative. If more than one depreciation factor from this table is applicable the assessor shall only apply the lowest factor (factor that allows the greatest amount of depreciation).

Code	Description	Depreciation Factor
A1	Pipe having a diameter greater than 246.2 mm and contained within the boundaries of Canadian Forces Base Suffield	**0.95**
B	Pipe constructed prior to 1940*	**0.50**
D	Discontinued	**0.10**
W	Pipe that has • a "From" facility code of WE **and** • a "From" legal location description with the same LSD, Section, Township, Range and Meridian that contains a non-producing well as defined in the 2002 Linear Property Assessment Manual **	**0.10**

Note: Status declared by each company.*
Does not include wells with an "Abandoned" status at the AEUB.**

4.003.200 SINGLE-ZONE AND MULTI-ZONE WELLS (WL)

Additional depreciation for a well shall be determined using the table below. The operational data of a well are compiled for the period of 12 months before October 31 of the assessment year as determined on the record at Alberta Energy and Utilities Board.

Additional Depreciation Factor Table

Code	Single-Zone and Multi-Zone Wells		Depreciation Factor
	Non-producing well		**0.10**
	Suspended well*		**0.10**
	Operational Oil well thru-put	>477 m^3	**1.00**
	Operational Oil well thru-put	>397 – 477 m^3	**0.86**
	Operational Oil well thru-put	>318 - 397 m^3	**0.72**
	Operational Oil well thru-put	>238 - 318 m^3	**0.57**
	Operational Oil well thru-put	>159 - 238 m^3	**0.43**
	Operational Oil well thru-put	>79 - 159 m^3	**0.29**
	Operational Oil well thru-put	1 - 79 m^3	**0.15**
	Operational Gas well thru-put	>507 10^3m^3	**1.00**
	Operational Gas well thru-put	>423 – 507 10^3m^3	**0.86**
	Operational Gas well thru-put	>282 – 423 10^3m^3	**0.62**
	Operational Gas well thru-put	>141 – 282 10^3m^3	**0.39**
	Operational Gas well thru-put	1 – 141 10^3m^3	**0.15**
	Operational Pool Code 0158 well thru-put	>183 10^3m^3	**1.00**
	Operational Pool Code 0158 well thru-put	>142 – 183 10^3m^3	**0.86**
	Operational Pool Code 0158 well thru-put	>86 – 142 10^3m^3	**0.62**
	Operational Pool Code 0158 well thru-put	>29 – 86 10^3m^3	**0.39**
	Operational Pool Code 0158 well thru-put	1 – 29 10^3m^3	**0.15**
	Injection/Disposal/Storage well operating	>720 hrs	**1.00**
	Injection/Disposal/Storage well operating	>599 – 720 hrs	**0.86**
	Injection/Disposal/Storage well operating	>359 – 599 hrs	**0.72**
	Injection/Disposal/Storage well operating	>139 – 359 hrs	**0.49**
	Injection/Disposal/Storage well operating	1 – 139 hrs	**0.15**
	Water Source/Supply well operating	>720 hrs	**1.00**
	Water Source/Supply well operating	>599 – 720 hrs	**0.86**
	Water Source/Supply well operating	>359 – 599 hrs	**0.72**
	Water Source/Supply well operating	>139 – 359 hrs	**0.49**
	Water Source/Supply well operating	1 – 139 hrs	**0.15**

Note: For "Suspended" wells, apply the depreciation factor to the operating status of the well prior to the well being recorded as "Suspended" at the AEUB.*

5.000 SCHEDULE E–WELL SITE LAND (WS)

The assessed value for well site land shall be as prescribed in the table.

Geographic Boundary Description	Assessment Amount Per Well ($)
(WS) All locations	**1 460**

SUPPLEMENTAL INFORMATION I: 2002 CONSTRUCTION COST REPORTING GUIDE FOR REGULATED PROPERTY (APPENDIX V)

1.000 COSTS TO BE INCLUDED IN DETERMINING ASSESSABLE COSTS 69

1.100 DIRECT COSTS VERSUS INDIRECT COSTS 69

2.000 COSTS TO BE EXCLUDED IN DETERMINING ASSESSABLE COSTS 70

2.100 PRE-CONSTRUCTION AND POST-CONSTRUCTION COSTS 70

2.200 PRE-CONSTRUCTION ACTIVITIES 70

2.200.100 Feasibility Studies 70
2.200.200 Cancellation Charges 70

2.300 POST-CONSTRUCTION ACTIVITIES 71

2.300.100 Commissioning, Pre-production Runs, and Start up 71
2.300.200 Consumable Materials 71

2.400 PROPERTY THAT CANNOT BE ASSESSED 71

2.400.100 Royalties, Licenses, and Patent Fees 71
2.400.200 Mobile Equipment 71
2.400.300 Spare Equipment 71
2.400.400 Design Changes, Alterations, and Modifications 71
2.400.500 Interference Costs 71
2.400.600 Goods and Services Tax (GST) 72
2.400.700 Import Duty and Broker Fees 72
2.400.800 Bonus or Penalty 72
2.400.900 Computer Costs 72

2.500 PROPERTY EXEMPT FROM ASSESSMENT 72

2.600 ABNORMAL COSTS OF CONSTRUCTION 72

2.600.100 Travel Costs 72
2.600.200 Transportation Costs 73
2.600.300 Interest During Construction 73
2.600.400 Overtime 73
2.600.500 Property Taxes 73

GLOSSARY 75

FIGURE 1 FROM PROJECT COST TO BASE COST 77

1.000 COSTS TO BE INCLUDED IN DETERMINING ASSESSABLE COSTS

The costs of construction reported by the company to the assessor are the actual expenditures made in constructing the facility as referenced in the agreement with the contractor or as incurred directly by the company.

Construction costs include both direct and indirect costs.

1.100 DIRECT COSTS VERSUS INDIRECT COSTS

Direct costs are costs for labour, materials, and installation costs which can be directly related to the construction of a specific facility.

Indirect costs are costs incurred away from the site or are costs allocated to the project. Indirect costs are also incurred by a company that uses in-house resources to construct a facility.

The assessor should review the company submission to determine whether in-house staff has been involved in any construction activities. When such activities are identified allowances for indirect costs should be included.

Direct costs include but are not limited to:
- staff, including labour, supervision, inspection, janitorial, and security,
- materials used for construction,
- consulting fees,
- engineering, design, and surveys,
- construction equipment: including scaffolding, pumps, tools, and consumable supplies,
- monitoring and control of construction,
- handling, and storage of materials and equipment,
- equipment maintenance, repairs, and winterization,
- temporary facilities,
- clean-up costs, removal of rubbish, and
- security, including yard lighting and fire protection.

Indirect costs include but are not limited to:
- general contractor and subcontractor profit,
- contractors' overhead including administration costs and head office allocations,
- staff recruitment,
- permits: building, electrical, etc.,
- insurance: fire, liability, property, etc., and
- cost to obtain a performance bond.

2.000 COSTS TO BE EXCLUDED IN DETERMINING ASSESSABLE COSTS

The following list of costs to be excluded when determining assessable cost. This list is not intended as exhaustive.

Not all construction costs associated with a project are included in determining assessable cost. A project cost may be excluded from assessable cost for one or more of the following reasons:

- it is the cost of a pre-construction activity,
- it is the cost of a post-construction activity,
- it is associated with a component of the project which is not defined as property in the Act,
- it is associated with property which is made exempt from assessment in the Act,

Two examples of abnormal costs are:

- a cost that would typically not be incurred in a balanced market, and/or
- a cost that is excluded to maintain consistency among regulated properties.

2.100 PRE-CONSTRUCTION AND POST-CONSTRUCTION COSTS

The identification of project costs that represent pre-construction and post-construction activities is somewhat arbitrary. It may be necessary for the assessor to meet with the company representative to determine the status of specific costs and to understand accepted industrial policies and practices.

2.200 PRE-CONSTRUCTION ACTIVITIES

2.200.100 FEASIBILITY STUDIES

The costs associated with studies evaluating the viability of a proposed project are excluded. The costs of feasibility studies must be reported separately from the costs of developing working models that facilitate construction or staff training, which are included as project costs.

2.200.200 CANCELLATION CHARGES

Payments made to a contractor for cancellation of a project before any construction is performed, are excluded.

2.300 POST-CONSTRUCTION ACTIVITIES

2.300.100 COMMISSIONING, PRE-PRODUCTION RUNS, AND START UP

The costs associated with the following activities occur after the physical completion of construction and are excluded.

Commissioning: the analysis and verification of operational processing or manufacturing systems.

Pre-production run: pre-operational run of the process allowing for adjustments, revisions, etc., that produce product to specification.

Start up: a run that produces on-specification product at design quantities within warranty provisions.

Note: the costs of equipment installed during commissioning, pre-production, and start up runs are included.

2.300.200 CONSUMABLE MATERIALS

The costs for chemicals and catalysts consumed as part of an industrial process and during commissioning, pre-production, and start up are excluded.

2.400 PROPERTY THAT CANNOT BE ASSESSED

The cost of "property", "improvements", "structures", or "machinery and equipment" that do not meet the legislated definitions are excluded.

2.400.100 ROYALTIES, LICENSES, AND PATENT FEES

The payments made for the right to use particular processes are excluded.

2.400.200 MOBILE EQUIPMENT

The costs for mobile equipment are excluded.

2.400.300 SPARE EQUIPMENT

Machinery and equipment stored on site, but not designated as standby equipment, is excluded.

2.400.400 DESIGN CHANGES, ALTERATIONS, AND MODIFICATIONS

Alteration costs incurred during construction that improve the operational efficiency of the original plant design, are excluded. Likewise, the costs of "debottlenecking" or modifying an operating process, are excluded if there are no changes to the equipment inventory.

Note: The cost of equipment installed to improve operational efficiency is included.

2.400.500 INTERFERENCE COSTS

Additional costs incurred for reasons of safety while working in close proximity to existing facilities, such as, the cost of pilings to ensure the structural integrity of existing buildings, the rerouting of piping, electrical lines, or telecommunications lines, are all excluded.

2.400.600 Goods and Services Tax (GST)

The GST paid on construction materials and services is excluded.

2.400.700 Import Duty and Broker Fees

The duty and fees levied on an imported component that increase its cost above the cost of a comparable component made in Canada, are excluded.

2.400.800 Bonus or Penalty

Bonuses such as those paid to a contractor for completion of the project prior to a stipulated deadline, are excluded. Similarly, a financial penalty imposed for failure to meet a condition in the contract are not deductible.

2.400.900 Computer Costs

Hardware and software computer costs that are not used, or intended to be used, as part of or in connection with the property being assessed, but are necessary to support the business activities carried on at the facility, such as accounting and personnel, are excluded.

2.500 PROPERTY EXEMPT FROM ASSESSMENT

Costs for property excluded from the assessment in accordance with Section 298 (1) of the Act are excluded.

2.600 ABNORMAL COSTS OF CONSTRUCTION

In order to reduce uncertainty and improve assessment consistency among regulated properties the following assumptions are made to describe normal conditions for the construction of regulated property:

- an adequate labour force is readily available at the worksite,
- raw materials and pre-fabricated component parts are readily available,
- projects are financed from operations or from shareholder equity and companies make no provision for interest during construction, and
- premium payments are not made for overtime worked.

The determination of what constitutes “typical” or “normal” is difficult; it is subjective and it may vary over time, from one location to another and among industries. If the actual costs of an industrial facility are greater than typical construction costs, the excess construction costs of the facility are considered abnormal and are excluded.

Abnormal costs can result from delays in construction caused by natural disasters, inclement weather or they may occur when the construction workforce is on site but a lack of supplies or a work slowdown reduces or stops actual construction. Additional costs incurred because of unproductive labour are excluded.

Specific documentation is required to substantiate claims for abnormal costs.

2.600.100 Travel Costs

The costs of paying staff for time spent travelling to and from the worksite or any costs to supply transportation for the workforce to and from the site are excluded.

2.600.200 TRANSPORTATION COSTS

The costs of transporting raw material and components from the Edmonton area to the work site are excluded. However, if the actual transportation costs from the point of origin to the plant site are equal to or less than the cost to the Edmonton area, the entire transportation costs are included.

Note: The cost of loading and unloading the raw materials and components are included.

2.600.300 INTEREST DURING CONSTRUCTION

The interest to finance the construction of a regulated property is excluded.

2.600.400 OVERTIME

The premium portion of wages and fringe benefits paid for overtime is excluded. For example, if time and a half is paid, the time portion is included however the half portion is excluded.

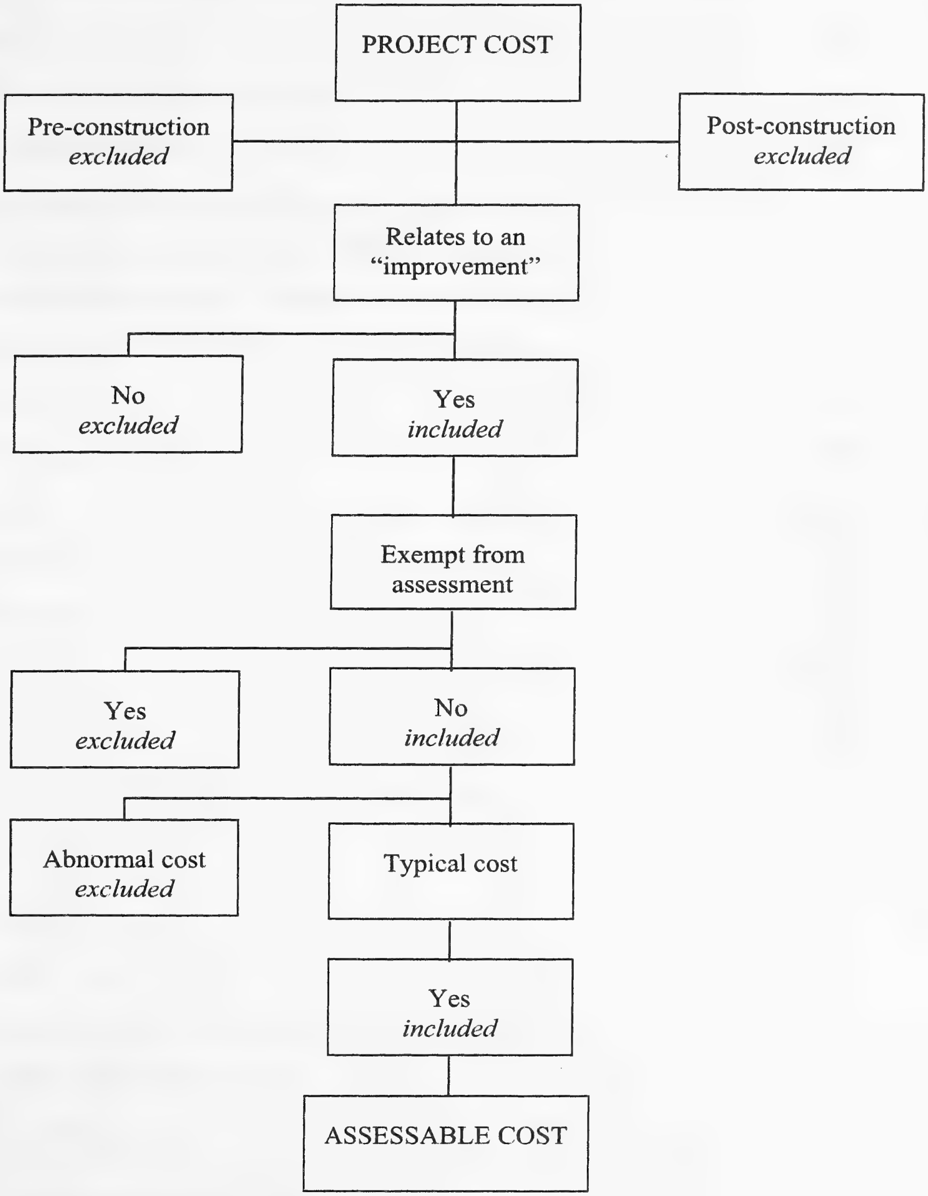
2.600.500 PROPERTY TAXES

The property and business taxes paid on a facility are excluded.

GLOSSARY

Act	The *Municipal Government Act*, S.A. 1994 cM-26.1
Company	The assessed person as described in Section 304 of the *Municipal Government Act*.
Company representative	A person authorized by the company in writing to provide information that will be used for the purposes of preparing an assessment.
Contractor	The person or firm designated by contract as responsible for the overall construction of the facility.
Edmonton area	The City of Edmonton and the surrounding area within 50 kilometres of the City limits.

Figure 1 **From Project Cost To Base Cost**



SUPPLEMENTAL INFORMATION II: INTERPRETIVE GUIDE TO APPENDIX V

INTRODUCTION 81

SCOPE AND PURPOSE OF THIS GUIDE 81

REPORTING CONSTRUCTION COSTS 82

STANDARDS FOR REPORTING COSTS 82

STRUCTURES VERSUS MACHINERY COSTS 83

THE ASSESSOR'S AUTHORITY TO REQUEST INFORMATION 83

CONFIDENTIALITY OF INFORMATION 83

ASSESSABLE COSTS 84

FROM PROJECT COST TO ASSESSABLE COST 85

INCLUDED COSTS 87

DIRECT COSTS VERSUS INDIRECT COSTS 87

Consulting Fees 88
Working Models 88
Site Preparation 88
Freight Charges 88
Temporary Facilities 88
Testing 89
Site Improvements 89
Retaining Walls, Reinforced Earth Walls, and Earth Berms 89
Fire Protection 89
Communication Systems 89
Computer Costs 90
Standby Equipment 90
Cranes and Craneways 90

EXCLUDED COSTS 91

PRE-CONSTRUCTION AND POST-CONSTRUCTION COSTS 91

PRE-CONSTRUCTION ACTIVITIES 91

Feasibility Studies 91
Cancellation Charges 91

POST-CONSTRUCTION ACTIVITIES 91

Commissioning, Pre-Production Runs, and Start-up 91

PROPERTY THAT CANNOT BE ASSESSED 91

Royalties, Licenses, and Patent Fees 92

Mobile Equipment 92
Consumable Materials 92
Spare Equipment 92

PROPERTY EXEMPT FROM ASSESSMENT 92

Design Changes, Alterations, and Modifications 92
Interference Costs 93
Goods and Services Tax (GST) 93
Import Duty and Broker Fees 93
Bonus or Penalty 93
Computer Costs 93

ABNORMAL COSTS OF CONSTRUCTION 93

Travel Costs 94
Transportation Costs 94
Interest during Construction 94
Overtime 94
Property Taxes 94

GLOSSARY 95

REFERENCE 96

INTRODUCTION

SCOPE AND PURPOSE OF THIS GUIDE

The purpose of this guide is to assist company representatives in providing information needed by assessors to prepare assessments for regulated properties.

The procedures in this guide are intended to be consistent with the value standards prescribed in the *Matters Relating to Assessment and Taxation Regulation*. Issues of assessability are to be determined in accordance with the legislation.

The policies and procedures incorporated in this guide are modeled on the appraisal principle of reproduction cost, subject to divergences necessary to meet the requirements of Alberta's assessment legislation and to provide a stable property tax base.

The costs reported by the application of this guide are used by the assessor to determine the construction cost for property that is not described in Schedule A of the *Linear Property Assessment Manual* or Schedule A of the *Machinery and Equipment Assessment Manual*.

Much of the information used to determine construction cost is derived from the internal records of the company and provided by the company representative to the assessor. A company's internal records may also include project costs that should not be included by the assessor when determining the property assessment. This guide identifies costs that are typically included – as well as costs that are excluded – in the determination of the property assessment.

The principal objectives of this guide are to specify minimum standards for reporting construction costs, and to describe the construction costs that should be included in determining assessable cost.

REPORTING CONSTRUCTION COSTS

STANDARDS FOR REPORTING COSTS

The following standards are presented as minimum requirements for reporting construction costs:

- Documentation should represent all construction costs of structures and machinery and equipment. If actual costs are not available, engineering estimates can be provided with a commitment by the company representatives that actual costs will be provided when available.
- Assessors should make initial requests for information when construction begins. Reporting procedures can be agreed upon by the company representative and the assessor. Concerns can be addressed before an assessment is prepared.
- The level of detail reported should be sufficient to ensure the accurate accounting of future additions, the removal of machinery and equipment, or the demolition of structures.
- Costs for large facilities can be reported on an operational unit or process basis. Costs for small facilities can be reported on an item basis, grouped by structure or by process.
- Costs relating to structures should be clearly separated from those relating to machinery and equipment.
- All construction costs should be reported. The company representative should note those costs that the company believes should be excluded from the assessment and cite the appropriate section of this guide or provide a full explanation for the exclusion.
- The net cost of machinery and equipment removed from the facility is deducted.
- The company submission should be signed by a company representative who has authority to make the submission.

An assessor who receives a submission that does not meet these minimum requirements should return it to the company representative with a detailed description of its deficiencies.

STRUCTURES VERSUS MACHINERY COSTS

It is important to distinguish between the construction costs of structures and the costs of machinery and equipment. Machinery and equipment costs include the cost of any supporting foundations and footings required by the machinery and equipment. Structure costs may need to be prorated and a portion of foundation and footing costs assigned to machinery and equipment.

THE ASSESSOR'S AUTHORITY TO REQUEST INFORMATION

The company has a statutory duty under the *Municipal Government Act* to provide information to the assessor. The Act authorizes the assessor to request, and requires the company to provide, any information necessary for the assessor to prepare an assessment.

If a company does not provide the requested information by the statutory time frame under section 295(4) of the Act, the company loses its right of complaint to the Municipal Government Board or to an Assessment Review Board. The assessor also has the ability to request and obtain information under sections 294 and 296 of the Act.

CONFIDENTIALITY OF INFORMATION

All information reported to, or obtained by the assessor for the purpose of preparation of the assessment belongs to the municipality for which the assessor is acting.

This information is subject to access and confidentiality provisions of sections 299 to 301.1 of the *Municipal Government Act*, and, where applicable, the provisions of the *Freedom of Information and Protection of Privacy Act*.

ASSESSABLE COSTS

The costs of construction to be reported by the company to the assessor are the actual expenditures made in constructing the facility, as referenced in an agreement with the contractor or as incurred by the owner.

Construction costs include all costs of materials and labour required to construct an industrial facility, including the costs required to install production machinery and equipment.

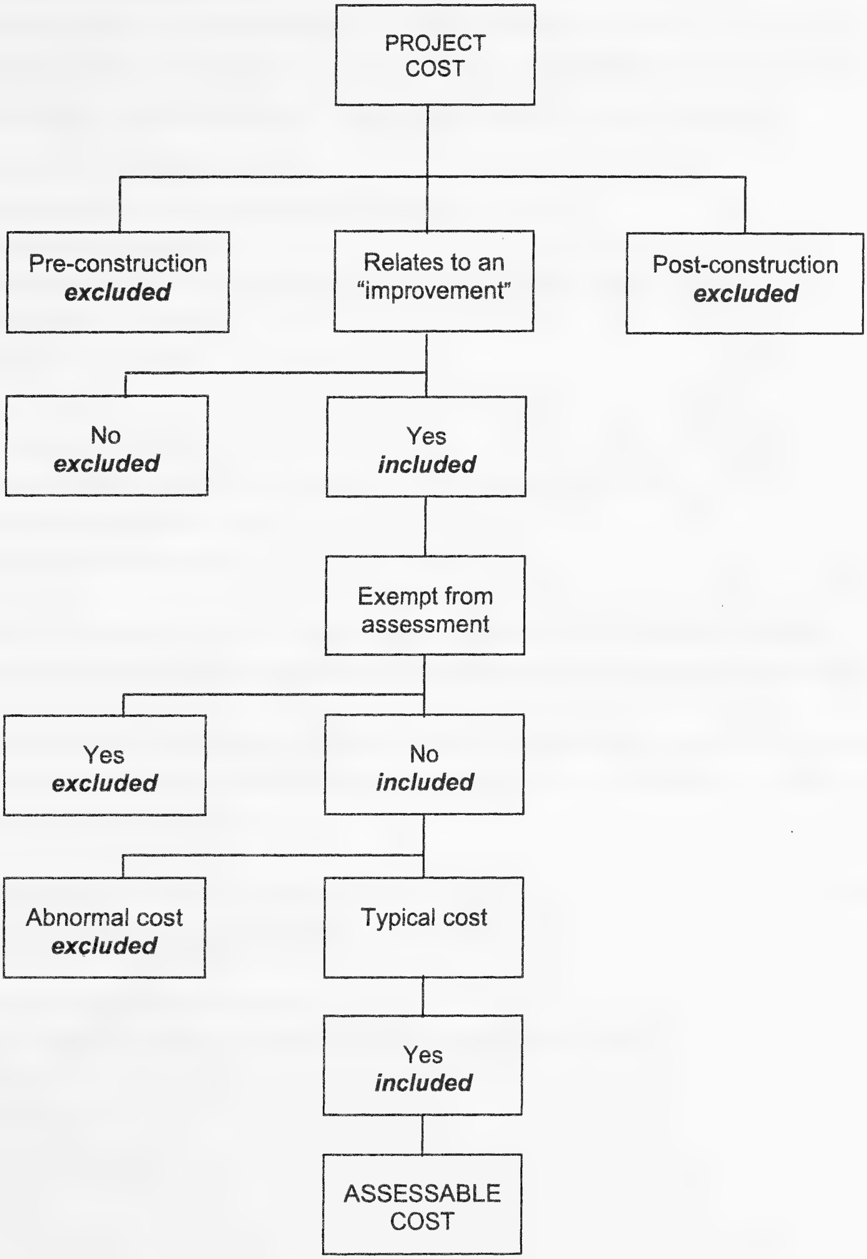
In addition to construction costs directly attributable to the project, reported costs include indirect costs assigned to the project.

Not all construction costs associated with a project are included in the determination of assessable cost. *(See diagram on page 85.)*

Project costs may be excluded for one or more of the following reasons:

- it is the cost of a pre-construction activity
- it is the cost of a post-construction activity
- it is associated with a component of the project that is not defined as property in the *Municipal Government Act*
- it is associated with property that is made exempt from assessment in the *Municipal Government Act*; and/or
- it is an abnormal cost if
    - in a balanced market it is a cost that would typically not be incurred, and/or
    - it is a cost that is excluded to maintain consistency among regulated properties.

FROM PROJECT COST TO ASSESSABLE COST



INCLUDED COSTS

DIRECT COSTS VERSUS INDIRECT COSTS

Construction costs are generally allocated between costs considered to be direct costs and those considered to be indirect costs. Direct costs are costs for labour and materials that can be directly related to the construction of a specific facility. These costs include but are not limited to:

- engineering, survey, and design studies
- staff: including labour, supervision, inspection, janitorial, and security
- materials used for construction
- construction equipment including scaffolding, pumps, tools, and consumable supplies
- handling and storage of materials
- equipment maintenance, repairs, and winterization
- temporary facilities
- security, including yard lighting
- building and site clean-up costs for the building and site, removal of rubbish, etc.
- permits: (building, electrical, etc.), and
- cost to obtain a performance bond.

Indirect costs are costs incurred by the contractor that are allocated to the project as overhead. Indirect costs are also incurred by the company that uses in-house resources to construct a facility.

The assessor should review the submission with the company representative to determine whether in-house staff has been involved in any construction activities. When such activities are identified, an allowance for overhead should be included.

The following list will assist in identifying costs that may be included in contractor overhead and need to be reported by the company for projects constructed in-house:

- general contractor and subcontractor profit
- contractor's overhead including administration costs and head office allocation
- consulting fees
- staff recruitment, and
- insurance (fire, liability, property, etc.).

The following examples of construction costs are NOT intended as an all inclusive list when determining assessable cost.

CONSULTING FEES

The costs of using consulting architects, engineers, and other specialists to advise on the project are included. An allowance for the costs of in-house consulting services should be included. *(See also: Feasibility Studies, page 91.)*

WORKING MODELS

The costs of working models to facilitate construction, improve operational efficiency, or train staff during construction are included.

SITE PREPARATION

The costs to clear, level, and finish the [illegible] to standards typical for industrial property in the area are included. *(See also: Site Improvements, page 89, Retaining Walls, etc., page 89 , and Abnormal Costs of Construction, page 93.)*

Note: *When the land assessment is based on the value of finished industrial land (stripped and graded), the actual site preparation costs are excluded.*

The costs to deal with adverse factors, for example topography or soil conditions not ordinarily encountered in construction projects, as well as reclamation costs required to bring the site back to the quality of raw land in the vicinity, are considered abnormal costs and are therefore excluded.

FREIGHT CHARGES

The costs of loading and unloading materials and equipment at the site are included. *(See also: Transportation Costs, page 94.)*

TEMPORARY FACILITIES

The costs of constructing improvements erected as part of construction and removed following construction, for example offices, warehouses, staff quarters, boundary fencing, and security fences are included. The construction costs of temporary utilities and services are also included.

The construction costs of temporary facilities that are assessed separately from the facility are excluded from the facility's construction cost. When one of these temporary facilities is removed, the remaining net cost is added to the construction cost of the facility. For example:

Assessable cost	*$300,000*

Cost recovered from sale	*$200,000*
Net cost added to the facility construction cost	*$100,000*

In the case of temporary facilities that are leased, the net lease costs are included.

Temporary camp facilities will be assessed separately as long as they are located on the site.

TESTING

The costs incurred while testing operating systems and equipment during construction are included. *(See also: Working Models, page 88, Feasibility Studies, page 91, and Commissioning, etc., page 91.)*

SITE IMPROVEMENTS

The costs of landscaping, parking lots, lighting, internal roads, and sidewalks are included. *(See also: Site Preparation, page 88, Working Models, page 88, Feasibility Studies, page 91, and Commissioning, etc., page 91.)*

RETAINING WALLS, REINFORCED EARTH WALLS, AND EARTH BERMS

The costs of constructing retaining walls, reinforced earth walls, and earth berms are included. *(See also: Site Improvements, page 89.)*

FIRE PROTECTION

The construction costs for the facility's fire protection including housings, hydrants, fire lines, and sprinkler systems are included.

COMMUNICATION SYSTEMS

The construction costs for internal communications systems are included.

COMPUTER COSTS

The computer costs, hardware and software, incurred during construction to monitor and control construction are included.

The computer costs, hardware and software that are an integral part of an operational unit, for example incurred to monitor, operate and/or control processing systems and equipment, are included. *(See also: Excluded Computer Costs, page 93.)*

STANDBY EQUIPMENT

The costs of standby equipment forming part of an operational unit intended to maintain continuous operation of a particular function in the event of peak loading or failure of the operational unit, are included.

Typically, standby equipment is found in operation or phases of an operation when it is not feasible to shut down the operation to replace a faulty piece of equipment. Common examples are power generators, pumps, motors, and compressors. *(See also: Spare Equipment, page 92.)*

CRANES AND CRANEWAYS

The costs of cranes and associated craneways that are used as an integral part of an operational process and/or to service equipment are included and are assessable as machinery and equipment. The supporting foundations for the cranes and craneways are considered machinery and equipment.

The costs of cranes and craneways that are not assessable as machinery and equipment, for example to load the finished product, are included and are assessable as structures.

EXCLUDED COSTS

PRE-CONSTRUCTION AND POST-CONSTRUCTION COSTS

The distinctions between construction costs and project costs representing pre-construction and post-construction activities are somewhat arbitrary. It may be necessary for the assessor to meet with company representatives to determine the status of specific costs and to understand accepted industrial policies and practices.

PRE-CONSTRUCTION ACTIVITIES

FEASIBILITY STUDIES

The costs associated with studies that evaluate the viability of a proposed project are excluded. The costs of feasibility studies must be reported separately from the costs for developing working models to facilitate construction or staff training which are included. *(See also: Consulting Fees, page 88, and Working Models, page 88.)*

CANCELLATION CHARGES

The payments made to a contractor for cancellation of a project before any construction is performed are excluded.

POST-CONSTRUCTION ACTIVITIES

COMMISSIONING, PRE-PRODUCTION RUNS, AND START-UP

These activities occur after the physical completion of construction or when contractual standards have been met in order for the facility to be turned over to the company. Costs associated with these activities are excluded. *(See also: Testing, page 89, and Design Changes, etc., page 92.)*

Note: *The cost of equipment installed during commissioning, pre-production, and start-up runs are included.*

Commissioning:	The analysis and verification of operational processing or manufacturing systems.
Pre-production run:	Pre-operational run of the process that allows for adjustments, revisions, etc., to produce the product to specification.
Start-up:	A run that produces an on-specification product at design quantities within the warranty provisions.

PROPERTY THAT CANNOT BE ASSESSED

In Alberta, assessments are based on the value of property as defined in the *Municipal Government Act*. The value of other types of property, such as personal property, are excluded. The definitions of property, improvement, structure, and machinery and equipment are set out in legislation.

ROYALTIES, LICENSES, AND PATENT FEES

The payments made for the right to use particular processes are excluded.

MOBILE EQUIPMENT

The costs of mobile equipment are excluded. *(See also: Cranes and Craneways, page 90.)*

CONSUMABLE MATERIALS

The costs of chemicals and catalysts consumed as part of an industrial process, and during commissioning, pre-production, and start-up, are excluded.

SPARE EQUIPMENT

The cost of machinery and equipment stored on site, but not designated as standby equipment, is excluded. *(See also: Standby Equipment, page 90.)*

PROPERTY EXEMPT FROM ASSESSMENT

The *Municipal Government Act*, in section 298 (1), specifically excludes certain property from assessment, even though it fits within the statutory definitions in the Act. For example, the Act excludes a portion of a water conveyance in a manufacturing or processing plant (clause (g)), and provides a similar exclusion for sewage conveyance systems (clause (h)).

DESIGN CHANGES, ALTERATIONS, AND MODIFICATIONS

Costs incurred during construction to make alterations that improve the operational efficiency of the original plant design are not assessable. Likewise, the costs of “de-bottlenecking” or modifying an operating process are not included as long as there are no changes to the equipment inventory.

The cost of equipment installed to improve operational efficiency is included.

INTERFERENCE COSTS

Additional costs incurred for reasons of safety while working in close proximity to existing facilities for example, the cost of pilings to ensure the structural integrity of existing buildings, the rerouting of piping, electrical lines, or telecommunications lines, are excluded.

GOODS AND SERVICES TAX (GST)

The GST paid on construction materials and services is excluded. The GST paid by the owner is credited against tax collected by the owner from the sale of plant products and need not be recovered in the price of the product itself.

IMPORT DUTY AND BROKER FEES

The duty and fees levied on an imported component that increase its cost above the cost of a comparable component made in Canada, are excluded.

BONUS OR PENALTY

Payments made to a contractor for completion of a project prior to a stipulated deadline, for example are excluded. Similarly, the amount of a financial penalty imposed on the contractor for failing to meet a condition in the contract may not be deducted.

COMPUTER COSTS

The computer costs, hardware and software, not required to operate the facility but necessary to support the business activities carried on at the facility, for example accounting and personnel are excluded. *(See also: Included Computer Costs, page 90.)*

ABNORMAL COSTS OF CONSTRUCTION

If the actual costs of an industrial facility are greater than typical construction costs, then the excess construction costs of the facility are considered abnormal and are excluded.

Additional costs incurred because of unproductive labour are excluded.

Abnormal costs can result from delays in construction caused by natural disasters or inclement weather. Abnormal costs may also occur when the construction workforce is on site, but a lack of supplies or a work slowdown reduces or stops actual construction.

Specific documentation is required to substantiate claims for abnormal costs.

The determination of what constitutes “typical” or “normal” is difficult; it is subjective and it may vary over time, from one location to another and among industries. In an attempt to reduce uncertainty and produce assessment consistency for regulated properties, a number of assumptions are made when describing normal conditions for the construction of regulated property:

- an adequate labour force is readily available at the worksite
- raw materials and pre-fabricated component parts are readily available
- projects are financed from operations or from shareholder equity and companies make no provision for interest during construction, and
- premium payments are not made for overtime worked.

TRAVEL COSTS

The costs of paying staff for time spent traveling to and from the worksite are excluded. The costs to supply transportation for the workforce to and from the site are excluded.

TRANSPORTATION COSTS

The costs of transporting raw material and components from the Edmonton area to the work site are excluded. However, if the actual transportation costs from the point of origin to the plant site are equal to or less than the cost would be to the Edmonton area, the entire transportation costs are included. *(See also: Freight Charges, page 88.)*

INTEREST DURING CONSTRUCTION

The cost of interest on money to finance the construction of a project is excluded.

OVERTIME

The premium portion of wages and fringe benefits paid for overtime for work performed is excluded. For example, where time and a half is paid, the **time** portion is included and the **half** portion is excluded.

PROPERTY TAXES

The property and business taxes paid on the facility are excluded.

GLOSSARY

Term	Definition
Company	The assessed person as described in the *Municipal Government Act,* SA 1994 c M-26.1, section 304.
Company representative	A person authorized by the company, in writing, to provide information that will be used for the purposes of preparing an assessment.
Contractor	The person or firm designated by the contract as responsible for the overall construction of the facility.
Cost	Generally used in appraisal to mean the expenditures, direct and indirect [overhead], of constructing an improvement. *International Association of Assessing Officers (IAAO), Glossary for Property Appraisal and Assessment, page 34.*
Edmonton area	The City of Edmonton and the surrounding area within 50 kilometres of the city limits.
Excluded cost	A cost that is excluded from the determination of assessable cost.
Improvement	As defined in the *Municipal Government Act,* SA 1994 c M-26.1, section 284(1)(j).
Included cost	A cost that is included in the determination of assessable cost.
Machinery and equipment	As defined in the *Matters Relating to Assessment and Taxation Regulation,* Alberta Regulation 289/99, section 2 (b).
Minister's Guidelines	A document setting out the prescribed procedure for preparation of assessment that is authorized by the *Municipal Government Act,* SA 1994 c M-26.1, section 289 and section 293 and provided for in the *Matters Relating to Assessment and Taxation Regulation*, Alberta Regulation 289/99.
Overhead cost	A cost that is not directly traceable to any given unit of output. Sometimes referred to as "indirect cost". It is impossible to draw a sharp line of demarcation between overhead and direct costs, and any classification of costs into these two groups is necessarily somewhat arbitrary. *IAAO Glossary for Property Appraisal and Assessment, (page 35)* define .
Property	As defined in the *Municipal Government Act, SA 1994 c M-26.1,* section *284 (1) (r).*
Structure	As defined in the *Municipal Government Act, SA 1994* c M-26.1, section 284 (1) (u).

REFERENCe

1. *Municipal Government Act*, SA 1994 c M-26.1, section 284 (1) (j), pp 129.
2. *Municipal Government Act*, SA 1994 c M-26.1, section 284 (1) (r), pp 133.
3. *Municipal Government Act*, SA 1994 c M-26.1, section 284 (1) (u), pp 134.
4. *Municipal Government Act*, SA 1994 c M-26.1, section 289, pp 135.
5. *Municipal Government Act*, SA 1994 c M-26.1, section 293, pp 137.
6. *Municipal Government Act*, SA 1994 c M-26.1, section 294, pp 137.
7. *Municipal Government Act*, SA 1994 c M-26.1, section 295 (4), pp 138.
8. *Municipal Government Act*, SA 1994 c M-26.1, section 296, pp 138.
9. *Municipal Government Act*, SA 1994 c M-26.1, section 298 (1), pp 140.
10. *Municipal Government Act*, SA 1994 c M-26.1, section 299-301.1, pp 144.
11. *Municipal Government Act*, SA 1994 c M-26.1, section 304, pp 145.
12. *Matters Relating to Assessment and Taxation Regulation*, Alberta Regulation 289/99.
13. *Glossary for Property Appraisal and Assessment*, International Association of Assessing Officers (IAAO), page 34 & page 35.

Copyright ©1997 by the International Association of Assessing Officers.

National Library of Canada
Bibliothèque nationale du Canada
3 3286 52835243 4

0779714601

Printed on Recycled Paper ♻